

<212> DNA

<213> Homo sapiens

<400> 2045

nnttgacac cgcgactat gccgccaccg cacggatcaa tcgcgacc cc agggcagggg
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 120
 cantacaggc ttggccgag cggggttgga agaaaccggt caaccggtgg ttggccccg
 180
 catcaatgcc cagaaccaga agccttgccg attcgtccca ggccggtcaa ggccgatggc
 240
 gagatcgctg cgatgactgg cgacggtgac aacgacgcc cctcgctcaa ggcgcccat
 300
 atcggtgtcg ccatggacaa acgcggcacc gacgtcgccg gcgaggttc cgccatggtc
 360
 ctgctcgagg atgattttgg atcgatcggt cagtcggtcc ggctcg
 406

<210> 2046

<211> 135

<212> PRT

<213> Homo sapiens

<400> 2046

Xaa	Trp	Thr	Pro	Ala	Thr	Met	Pro	Pro	Pro	His	Gly	Ser	Ile	Ala	Asp
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Pro	Gly	Gln	Gly	Met	Arg	Arg	Met	Gly	Asp	Gly	Asp	Gly	Pro	Gly	Ala
		20					25						30		
Gly	Pro	Gly	Arg	Ser	Leu	Arg	Arg	Xaa	Tyr	Arg	Leu	Trp	Pro	Arg	Arg
		35				40					45				
Val	Gly	Arg	Asn	Arg	Ser	Thr	Gly	Gly	Leu	Ala	Pro	His	Gln	Cys	Pro
		50			55						60				
Glu	Pro	Glu	Ala	Leu	Arg	Ile	Arg	Pro	Arg	Pro	Phe	Lys	Ala	Asp	Gly
		65		70				75						80	
Glu	Ile	Val	Ala	Met	Thr	Gly	Asp	Gly	Val	Asn	Asp	Ala	Pro	Ser	Leu
		85						90					95		
Lys	Ala	Ala	His	Ile	Gly	Val	Ala	Met	Asp	Lys	Arg	Gly	Thr	Asp	Val
		100					105						110		
Ala	Arg	Glu	Ala	Ser	Ala	Met	Val	Leu	Leu	Glu	Asp	Asp	Phe	Gly	Ser
		115				120						125			
Ile	Val	Gln	Ser	Val	Arg	Leu									
		130				135									

<210> 2047

<211> 796

<212> DNA

<213> Homo sapiens

<400> 2047

aagcttttga acgagacccc tgagctctgg gttcagcccc gaggaagccc agcaacagga
 60
 tgaggaattt gagaagaaga ttccaagtgt ggaagacagc cttggagagg gcagcagggg
 120

tgcctggccgg ccaggagaga gaggatccgg gggcttggtc agtcctagca ctgccacgt
 180
 gccggatggg gcactcgggc agagagacca gagcagctgg caaacagtg atgctagcca
 240
 ggaggtggga gggcatcagg agagacagca ggcaggggct caggccctg gcagtgtga
 300
 cctggaagat ggggagatgg gaaagcgagg ctgggtcggg gagtttagcc tcagtgttg
 360
 cccccagca gaggcagcat ttagcccagg gcagcaggac tggagccggg acttctgcac
 420
 cgaggccagt gagaggagct atcagtttgg catcattggc aacgacagag tgagtgtgac
 480
 tggcttttag ccttctagca agatggaagg tggtcacttt gtgcctcctg ggaagaccac
 540
 agctggctcg gtggactgga ctgaccagct gggctcagg aactggaag tgtccagctg
 600
 tgtgggttct gggggctcga gcgaggccag ggagagtgcc gtgggacaga tgggctggtc
 660
 aggtggcctg agcttgagag acatgaacct gaccggctgt ttggaagtg gagggctga
 720
 agagccgggg ggaatcgaa ttggggagaa ggactggact tctgatgta atgtgaagag
 780
 caaagatttg gctgag
 796

<210> 2048

<211> 160

<212> PRT

<213> Homo sapiens

<400> 2048

Met	Gly	Lys	Arg	Gly	Trp	Val	Gly	Glu	Phe	Ser	Leu	Ser	Val	Gly	Pro
1				5					10					15	
Gln	Arg	Glu	Ala	Ala	Phe	Ser	Pro	Gly	Gln	Gln	Asp	Trp	Ser	Arg	Asp
			20					25					30		
Phe	Cys	Ile	Glu	Ala	Ser	Glu	Arg	Ser	Tyr	Gln	Phe	Gly	Ile	Ile	Gly
		35				40						45			
Asn	Asp	Arg	Val	Ser	Gly	Ala	Gly	Phe	Ser	Pro	Ser	Ser	Lys	Met	Glu
	50					55				60					
Gly	Gly	His	Phe	Val	Pro	Pro	Gly	Lys	Thr	Thr	Ala	Gly	Ser	Val	Asp
65					70				75					80	
Trp	Thr	Asp	Gln	Leu	Gly	Leu	Arg	Asn	Leu	Glu	Val	Ser	Ser	Cys	Val
			85					90						95	
Gly	Ser	Gly	Gly	Ser	Ser	Glu	Ala	Arg	Glu	Ser	Ala	Val	Gly	Gln	Met
			100					105					110		
Gly	Trp	Ser	Gly	Gly	Leu	Ser	Leu	Arg	Asp	Met	Asn	Leu	Thr	Gly	Cys
		115				120					125				
Leu	Glu	Ser	Gly	Gly	Ser	Glu	Glu	Pro	Gly	Gly	Ile	Gly	Ile	Gly	Glu
	130					135					140				
Lys	Asp	Trp	Thr	Ser	Asp	Val	Asn	Val	Lys	Ser	Lys	Asp	Leu	Ala	Glu
145					150				155						160

<210> 2049

<211> 516

<212> DNA

<213> Homo sapiens

<400> 2049

cgcgtcgctt acggtgcgct gaataccagc ctgctggcgc tggcggtcag cttcgcgtcg
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 ctgttctctg ggatagtgtt cgggctgatg ccacgtctga tgtcggggtg gattgaactg
 120
 gccaacgctc ccccaccaat cgccttgggc ctgttagtag tcgcattag cgcccttca
 180
 gcctacggtg ccgctgtgc ggtgatgttg gtcagttggg ctcgctggc cgccattgt
 240
 gcttcgttgt tggcggaagc ccgacgcag ccctatatcc gcattgtgcc ggtattggg
 300
 gtgcggcgat ggcgcacgct gacccactac ctgctgccgg cgctctctgc tccctctgtg
 360
 cgccacgcca tgttcgtctt gccgggcatt gcgctggcgc tggcggcctt gggttttttt
 420
 ggtcttgggc cgcagccacc cagtgcagaa tgggggctgg tgctggcgga aggcattgct
 480
 tatctcgaac gggcgccctg gggagtcctg gcaccg
 516

<210> 2050

<211> 172

<212> PRT

<213> Homo sapiens

<400> 2050

Arg	Val	Ala	Tyr	Gly	Ala	Leu	Asn	Thr	Ser	Leu	Leu	Ala	Leu	Ala	Val
1				5				10					15		
Ser	Phe	Ala	Ser	Leu	Phe	Leu	Gly	Ile	Val	Phe	Gly	Leu	Met	Pro	Arg
			20				25					30			
Leu	Met	Cys	Gly	Val	Ile	Glu	Leu	Ala	Asn	Ala	Pro	Pro	Pro	Ile	Ala
		35				40					45				
Leu	Gly	Leu	Leu	Val	Val	Ala	Ile	Ser	Gly	Pro	Ser	Ala	Tyr	Gly	Ala
	50				55					60					
Ala	Cys	Ala	Val	Met	Leu	Val	Ser	Trp	Ala	Pro	Leu	Ala	Ala	His	Cys
65				70					75					80	
Ala	Ser	Leu	Leu	Ala	Glu	Ala	Arg	Thr	Gln	Pro	Tyr	Ile	Arg	Met	Leu
			85					90						95	
Pro	Val	Leu	Gly	Val	Gly	Arg	Trp	Arg	Thr	Leu	Thr	His	Tyr	Leu	Leu
		100					105						110		
Pro	Ala	Leu	Ser	Ala	Pro	Leu	Leu	Arg	His	Ala	Met	Leu	Arg	Leu	Pro
		115				120					125				
Gly	Ile	Ala	Leu	Ala	Leu	Ala	Ala	Leu	Gly	Phe	Phe	Gly	Leu	Gly	Pro
	130				135					140					
Gln	Pro	Pro	Ser	Ala	Glu	Trp	Gly	Leu	Val	Leu	Ala	Glu	Gly	Met	Pro
145				150					155					160	
Tyr	Leu	Glu	Arg	Ala	Pro	Trp	Gly	Val	Leu	Ala	Pro				
				165					170						

<210> 2051

<211> 411

<212> DNA

<213> Homo sapiens

<400> 2051

gagcaaaact atcgctctac cggcaatatt ctgaaaagtg ccaaccaact tatttcgaat
 60
 aatagtgatc gtctcggtaa gaatttatgg accgacggg aaatggggga gccagtaggt
 120
 atttatgcag catttaatga attagatgag gcaaaatttg tggcgtctca aatccaaaat
 180
 tgggtagatg atgggtggga attagatgat tgtgctgttt tatatcgtag taatagccaa
 240
 tctcgtgtta ttgaagaagc cttgattcgt tgccaaattc cttatcgaat ttatggcggg
 300
 atgcgattct tcgaacgcca agaaattaaa gatgcgttgg catatttacg ttttaattaat
 360
 aatcgtcaag atgatgccgc atttgagcgt gtgattaata cgcctacgcg t
 411

<210> 2052

<211> 137

<212> PRT

<213> Homo sapiens

<400> 2052

Glu	Gln	Asn	Tyr	Arg	Ser	Thr	Gly	Asn	Ile	Leu	Lys	Ser	Ala	Asn	Gln
1				5					10					15	
Leu	Ile	Ser	Asn	Asn	Ser	Asp	Arg	Leu	Gly	Lys	Asn	Leu	Trp	Thr	Asp
			20					25				30			
Gly	Glu	Met	Gly	Glu	Pro	Val	Gly	Ile	Tyr	Ala	Ala	Phe	Asn	Glu	Leu
		35					40					45			
Asp	Glu	Ala	Lys	Phe	Val	Ala	Ser	Gln	Ile	Gln	Asn	Trp	Val	Asp	Asp
		50				55				60					
Gly	Gly	Glu	Leu	Asp	Asp	Cys	Ala	Val	Leu	Tyr	Arg	Ser	Asn	Ser	Gln
65				70					75					80	
Ser	Arg	Val	Ile	Glu	Glu	Ala	Leu	Ile	Arg	Cys	Gln	Ile	Pro	Tyr	Arg
			85					90				95			
Ile	Tyr	Gly	Gly	Met	Arg	Phe	Phe	Glu	Arg	Gln	Glu	Ile	Lys	Asp	Ala
		100					105					110			
Leu	Ala	Tyr	Leu	Arg	Leu	Ile	Asn	Asn	Arg	Gln	Asp	Asp	Ala	Ala	Phe
		115					120				125				
Glu	Arg	Val	Ile	Asn	Thr	Pro	Thr	Arg							
		130					135								

<210> 2053

<211> 287

<212> DNA

<213> Homo sapiens

<400> 2053

nccatggaag ccttcaatct tgtaagagaa agtgaacagc tgttttccat atgccaaatc
 60
 ccgctcctct gctggatcct gtgtaccagt ctgaagcaag agatgcagaa aggaaaagac
 120

ctggccctga cctgccagag cactacctct gtgtactcct ctttcgtctt taacctgttc
 180
 acacctgagg gtgccgaggg ccgactccg caaaccagc accagctgaa ggcctgtgc
 240
 tccctggctg cagagggtat gtggacagac acatttgagt tttgtga
 287

<210> 2054

<211> 79

<212> PRT

<213> Homo sapiens

<400> 2054

Ile	Cys	Gln	Ile	Pro	Leu	Leu	Cys	Trp	Ile	Leu	Cys	Thr	Ser	Leu	Lys
1				5					10					15	
Gln	Glu	Met	Gln	Lys	Gly	Lys	Asp	Leu	Ala	Leu	Thr	Cys	Gln	Ser	Thr
			20					25					30		
Thr	Ser	Val	Tyr	Ser	Ser	Phe	Val	Phe	Asn	Leu	Phe	Thr	Pro	Glu	Gly
			35				40					45			
Ala	Glu	Gly	Pro	Thr	Pro	Gln	Thr	Gln	His	Gln	Leu	Lys	Ala	Leu	Cys
	50					55				60					
Ser	Leu	Ala	Ala	Glu	Gly	Met	Trp	Thr	Asp	Thr	Phe	Glu	Phe	Cys	
65					70					75					

<210> 2055

<211> 298

<212> DNA

<213> Homo sapiens

<400> 2055

nnacgcgttg ttatgaacaa tgacgggtgc ctctaccccg atacctgcgt gggacttgat
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 tccccacacca ccattgaaaa ttgtcttggc attctgggct gggcgctcgg tggtattgaa
 120
 gccgaggctg ctatgcttgg ccagcccatc tccatgctta tccccctgtg tgttggcttt
 180
 aaacttactg gccaaacaca gccgggtgtc accgctacag atgttgttct taccattact
 240
 gatattgcttc gccagcatgg tgtgggtgga aaattcgggg aattctatgg gggaagcg
 298

<210> 2056

<211> 99

<212> PRT

<213> Homo sapiens

<400> 2056

Xaa	Arg	Val	Val	Met	Asn	Asn	Asp	Gly	Val	Leu	Tyr	Pro	Asp	Thr	Cys
1				5					10					15	
Val	Gly	Thr	Asp	Ser	His	Thr	Thr	Met	Glu	Asn	Gly	Leu	Gly	Ile	Leu
				20				25					30		
Gly	Trp	Gly	Val	Gly	Gly	Ile	Glu	Ala	Glu	Ala	Ala	Met	Leu	Gly	Gln
			35				40					45			
Pro	Ile	Ser	Met	Leu	Ile	Pro	Arg	Val	Val	Gly	Phe	Lys	Leu	Thr	Gly

50					55					60					
Gln	Thr	Gln	Pro	Gly	Val	Thr	Ala	Thr	Asp	Val	Val	Leu	Thr	Ile	Thr
65					70					75				80	
Asp	Met	Leu	Arg	Gln	His	Gly	Val	Gly	Gly	Lys	Phe	Gly	Glu	Phe	Tyr
				85					90					95	

Gly Gly Ser

<210> 2057
 <211> 569
 <212> DNA
 <213> Homo sapiens

<400> 2057
 acgcggtcccg acagtaccga ctataacgga ggaaactatc aggaacggta taaaatttta
 60
 gcagaaattc gtaaggctct tgaagacgga gatcgccaaa aagccaaacg attagctgaa
 120
 caaaatctag ttggaccaa caacgccag tatggctggt atctagcctt tgggtatata
 180
 ttcatggctt tcaataacca gaaaaagggg ctggatacag ttacagacta tcaccgtggt
 240
 ttggatatca cagaagccac tactacaact tcttacaccc aagatggaac gacctttaaa
 300
 agagaaacct tctcaagtta cctgatgat gttactgtta ctcaactgac ccaaaaaggg
 360
 gacaaaaaac ttgattttac agtttgaat agcttaacag aagatttact tgctaacgga
 420
 gactactcag cggaatattc taactacaag agtggccatg ttacgacaga cccaaatggt
 480
 atcctactaa aaggtacagt caaagataat ggcctccagt tcgcatccta tctaggaatt
 540
 aaaacggacg gaaaagttac tgttcatga
 569

<210> 2058
 <211> 128
 <212> PRT
 <213> Homo sapiens

<400> 2058
 Met Val Phe Asn Asn Gln Lys Lys Gly Leu Asp Thr Val Thr Asp Tyr
 1 5 10 15
 His Arg Gly Leu Asp Ile Thr Glu Ala Thr Thr Thr Thr Tyr Thr
 20 25 30
 Gln Asp Gly Thr Thr Phe Lys Arg Glu Thr Phe Ser Ser Tyr Pro Asp
 35 40 45
 Asp Val Thr Val Thr His Leu Thr Gln Lys Gly Asp Lys Lys Leu Asp
 50 55 60
 Phe Thr Val Trp Asn Ser Leu Thr Glu Asp Leu Leu Ala Asn Gly Asp
 65 70 75 80
 Tyr Ser Ala Glu Tyr Ser Asn Tyr Lys Ser Gly His Val Thr Thr Asp
 85 90 95
 Pro Asn Gly Ile Leu Leu Lys Gly Thr Val Lys Asp Asn Gly Leu Gln

	100		105		110										
Phe	Ala	Ser	Tyr	Leu	Gly	Ile	Lys	Thr	Asp	Gly	Lys	Val	Thr	Val	His
	115						120					125			

<210> 2059

<211> 644

<212> DNA

<213> Homo sapiens

<400> 2059

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gaattcgtgc caccgtgcc atacttcgcc acgcaacaga gtgccgtcag cggattgggc
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agcaatcgac ctgtaggact cagccatgat cgactgggca tcctcgtata gtcgcatgc
120
cgcaaccgcc tgcgcttcca agcctgcagc gacgtaagag gccctctcac aactgaacc
180
gattcgctcca gacaacgtgg aagcgataac ctgcgctcgc ttctgctgat tctgggccaa
240
gctcgacaag aagaaccgca gaggggagcag ggcctgtgta gggagcgcac cttcagcgtt
300
cgtcttggtc tccgggacag caaaaagcgg ggaatcagcc aggccacgct ccgctcatgag
360
tcggccgagg tccgccggta cctctctcat ggcttcaca ggaacgcggt cacacaccac
420
cgcgatcgac gcgtgcctct cttgagcctc gttgaggaaa tccacaggca cagcgctcagc
480
gtagcgggct gctgaggatg caaagatcca cagatccgag ccttgaggca actgagccgc
540
cagatcacga ttgcccgtca ccacagagtc gatgtccggg gcacgagga tggccaaacc
600
tcgcggaatc cttgactccg cgacgagctg caaactcgac gcgt
644

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<210> 2060

<211> 130

<212> PRT

<213> Homo sapiens

<400> 2060

Met	Arg	Glu	Val	Pro	Ala	Asp	Leu	Gly	Arg	Leu	Met	Thr	Glu	Arg	Gly
1				5					10					15	
Leu	Ala	Asp	Ser	Pro	Leu	Phe	Ala	Val	Pro	Glu	Thr	Lys	Thr	Asn	Ala
			20					25						30	
Glu	Gly	Ala	Leu	Pro	Asp	Gln	Ala	Val	Ala	Pro	Leu	Arg	Phe	Phe	Leu
			35				40					45			
Ser	Ser	Leu	Ala	Gln	Asn	Gln	Gln	Lys	Arg	Arg	Glu	Val	Ile	Ala	Ser
			50			55					60				
Thr	Leu	Ser	Gly	Ala	Ile	Gly	Ser	Val	Cys	Glu	Arg	Ala	Ser	Tyr	Val
			65		70				75					80	
Ala	Ala	Gly	Leu	Glu	Ala	Gln	Ala	Val	Ala	Ala	Ser	Arg	Leu	Tyr	Glu
			85					90					95		
Asp	Ala	Gln	Ser	Ile	Met	Ala	Glu	Ser	Tyr	Arg	Ser	Ile	Ala	Ala	Gln
			100				105					110			
Ser	Ala	Asp	Gly	Thr	Leu	Leu	Arg	Gly	Glu	Val	Leu	Ala	Arg	Trp	His

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115              120              125
Glu Phe
130

<210> 2061
<211> 481
<212> DNA
<213> Homo sapiens

<400> 2061
gttaacctgg taaggagagc gacacaggaa ggtgcagggg ttgccatggt gtgccccag
60
atgctgtgat tacgcgccag ccccgtcaca ccgtacgggt ggtaggactg ggcaaagaag
120
acgccgccac ctggatgcac tgagggtgtgc acagccacgt ggagatgatg ctggggggctc
180
acgggtgactc tcaggaggcc ctggcctggc ctatctggag ccttctctgt gaaatgagge
240
tggttaacgcc cactagcagg gttgtagggg acatggatct gtggccacct cctcaagggt
300
tgccacacgc accaggtcct gactgggagt ccggccccc gggcctgtgg atggctggcc
360
tgggcccagc ctccgcccc aagggtgctg gcacctggga tgtcccgac agttgggggc
420
ggctggtggg aagggtgtgtg tcagggtggcg gagcctcggg gccaggatct cactcacgcg
480
t
481

<210> 2062
<211> 133
<212> PRT
<213> Homo sapiens

<400> 2062
Met Pro Gly Ala Ser Thr Leu Gly Gly Gly Trp Ala Gln Ala Ser
1          5          10          15
His Pro Gln Ala Leu Gly Ala Gly Leu Pro Val Arg Thr Trp Cys Val
20        25        30
Trp Gln Pro Leu Arg Arg Trp Pro Gln Ile His Val Pro Tyr Asn Pro
35        40        45
Ala Ser Gly Arg Tyr Gln Pro His Phe Thr Glu Lys Ala Pro Asp Arg
50        55        60
Pro Gly Gln Gly Leu Leu Arg Val Thr Val Ser Pro Gln His His Leu
65        70        75        80
His Val Ala Val His Thr Ser Val His Pro Gly Gly Gly Val Phe Phe
85        90        95
Ala Gln Ser Tyr His Pro Tyr Gly Val Thr Gly Leu Ala Arg Asn His
100       105       110
Ser Ile Trp Gly His Thr Met Ala Thr Pro Ala Pro Ser Cys Val Ala
115       120       125
Leu Leu Thr Arg Leu
130

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<210> 2063
 <211> 419
 <212> DNA
 <213> Homo sapiens

<400> 2063
 gccggcgccg tegagcgcggt gcctttcaat atcgaggccc aagacatggt gctgctcatc
 60
 ggggacacca atgccccgca catgctttcc gaaggccaat acgcctcccg cgggggcatc
 120
 atcgacgccc tccaatctgc cgcgggttgc tccatccgag agatctcgaa tgcggtggac
 180
 ttgcccgcga cgtcaatcc cgcgaggcg gaactctatc gccgcccgt gcaccacgtg
 240
 gtggaagaaa ccaaccggac cctagatgcc gctaccgccc tggcatcttc cgtcttagat
 300
 acattccggc ggcttatgcy cgagagccac atctccctgc cgcaccttta tgaggtcacc
 360
 actccggagc tgcactccgt tttaccgcy gccggcgagc tgggcgctcg catgannnn
 419

<210> 2064
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 2064
 Ala Gly Ala Val Glu Arg Val Pro Phe Asn Ile Glu Ala Gln Asp Met
 1 5 10 15
 Val Leu Leu Ile Ala Asp Thr Asn Ala Pro His Met Leu Ser Asp Gly
 20 25 30
 Gln Tyr Ala Ser Arg Arg Gly Ile Ile Asp Ala Val Gln Ser Ala Ala
 35 40 45
 Gly Cys Ser Ile Arg Glu Ile Ser Asn Ala Val Asp Phe Ala Ala Thr
 50 55 60
 Val Asn Pro Ala Glu Ala Glu Leu Tyr Arg Arg Val His His Val
 65 70 75 80
 Val Glu Glu Thr Asn Arg Thr Leu Asp Ala Ala Thr Ala Leu Ala Ser
 85 90 95
 Ser Asp Leu Asp Thr Phe Arg Arg Leu Met Arg Glu Ser His Ile Ser
 100 105 110
 Leu Arg Asp Leu Tyr Glu Val Thr Thr Pro Glu Leu Asp Ser Val Phe
 115 120 125
 Thr Ala Ala Gly Glu Leu Gly Ala Arg Met Xaa
 130 135

<210> 2065
 <211> 598
 <212> DNA
 <213> Homo sapiens

<400> 2065
 gccggcgcta tggcctctct gctcgcgcac gccgcccgat cccttcccg cgcaaagggtg
 60

cgcgcgaccg ttactggatc ggccgggattg ggaaccgcag aggcattggg ccttactttc
 120
 attcaggagg tcatagctga gaecggccgc gtccaacgtt ggaatcccga cgccgacgtg
 180
 cttctcgaaac tcggtggtga ggatgccaa atcacctacc ttaagccggt ccccgaaacg
 240
 cgcataaatg gttcgtgtgc tgggtggcacc ggtgccttca tcgaccagat ggctaccctg
 300
 ctgcacacgg acactccggg cctcaatgac ctgcacatccc gagccaagac catccatccg
 360
 atcgccctgc gctgtggtgt ttttgccaag tccgaccttc agccctcat taacgagggg
 420
 gcccgccaag aggatctggc tgcctcggtc ctgcaggctg tcgccactca gtgcattgcc
 480
 ggccctggcat gtggtcgccc gattcgagggt aaggtcatct tccctggcgg tccgcttcc
 540
 tttatgccaa gtttgcgaga cgctttctcg cgcgtcctcg acggttaaggt tgacgcgt
 598

<210> 2066

<211> 199

<212> PRT

<213> Homo sapiens

<400> 2066

Ala	Gly	Ala	Met	Ala	Ser	Leu	Leu	Ala	Asp	Ala	Ala	Asp	Ala	Leu	Pro
1			5					10						15	
Gly	Ala	Lys	Val	Arg	Ala	Thr	Val	Thr	Gly	Ser	Ala	Gly	Leu	Gly	Thr
			20					25						30	
Ala	Glu	Ala	Leu	Gly	Leu	Thr	Phe	Ile	Gln	Glu	Val	Ile	Ala	Glu	Thr
			35				40					45			
Ala	Ala	Val	Gln	Arg	Trp	Asn	Pro	Asp	Ala	Asp	Val	Leu	Leu	Glu	Leu
			50			55				60					
Gly	Gly	Glu	Asp	Ala	Lys	Ile	Thr	Tyr	Leu	Lys	Pro	Val	Pro	Glu	Gln
65					70				75					80	
Arg	Met	Asn	Gly	Ser	Cys	Ala	Gly	Gly	Thr	Gly	Ala	Phe	Ile	Asp	Gln
				85				90						95	
Met	Ala	Thr	Leu	Leu	His	Thr	Asp	Thr	Pro	Gly	Leu	Asn	Asp	Leu	Ala
			100				105					110			
Ser	Arg	Ala	Lys	Thr	Ile	His	Pro	Ile	Ala	Ser	Arg	Cys	Gly	Val	Phe
			115			120					125				
Ala	Lys	Ser	Asp	Leu	Gln	Pro	Leu	Ile	Asn	Glu	Gly	Ala	Arg	His	Glu
			130			135				140					
Asp	Leu	Ala	Ala	Ser	Val	Leu	Gln	Ala	Val	Ala	Thr	Gln	Cys	Ile	Ala
145				150					155					160	
Gly	Leu	Ala	Cys	Gly	Arg	Pro	Ile	Arg	Gly	Lys	Val	Ile	Phe	Leu	Gly
			165					170						175	
Gly	Pro	Leu	His	Phe	Met	Pro	Ser	Leu	Arg	Asp	Ala	Phe	Ser	Arg	Val
			180					185					190		
Leu	Asp	Gly	Lys	Val	Asp	Ala									
			195												

<210> 2067

<211> 366

<212> DNA

<213> Homo sapiens

<400> 2067

ttccagcaga tgctgcaaac ctggaccgcg agcggcacgc tgcaggaggc cgtggccaaac
 60
 aagatcgccg aatggctgga tgccgacctg caacagtggg acatttcccg cgatgcaccg
 120
 tacttcgggt tcgagatccc gggcgagcca ggcaagtatt tctacgtgtg gctggacgcg
 180
 ccgatcggtt acatggccag tttcaagaac ctgtgcgacc gcacgccgga gctggacttc
 240
 gatgctttct gggccaagga ctccaccgcc gagctgtacc atttcacgga caaggacatc
 300
 gtcaacttcc acgccctgtt ctggccggcg atgctcgaag gctcggggcta ccgtaaaccg
 360
 accggt
 366

<210> 2068

<211> 122

<212> PRT

<213> Homo sapiens

<400> 2068

Phe	Gln	Gln	Met	Leu	Gln	Thr	Trp	Thr	Arg	Ser	Gly	Thr	Leu	Gln	Glu
1			5						10					15	
Ala	Val	Ala	Asn	Lys	Ile	Ala	Glu	Trp	Leu	Asp	Ala	Asp	Leu	Gln	Gln
			20				25						30		
Trp	Asp	Ile	Ser	Arg	Asp	Ala	Pro	Tyr	Phe	Gly	Phe	Glu	Ile	Pro	Gly
	35					40					45				
Glu	Pro	Gly	Lys	Tyr	Phe	Tyr	Val	Trp	Leu	Asp	Ala	Pro	Ile	Gly	Tyr
	50					55					60				
Met	Ala	Ser	Phe	Lys	Asn	Leu	Cys	Asp	Arg	Thr	Pro	Glu	Leu	Asp	Phe
65				70					75					80	
Asp	Ala	Phe	Trp	Ala	Lys	Asp	Ser	Thr	Ala	Glu	Leu	Tyr	His	Phe	Ile
			85					90					95		
Gly	Lys	Asp	Ile	Val	Asn	Phe	His	Ala	Leu	Phe	Trp	Pro	Ala	Met	Leu
	100						105						110		
Glu	Gly	Ser	Gly	Tyr	Arg	Lys	Pro	Thr	Gly						
	115						120								

<210> 2069

<211> 280

<212> DNA

<213> Homo sapiens

<400> 2069

ccatagagagg atgggtggaga ctgtgctgtg gcagggtgtt ccggaacctt ccctggggatg
 60
 catggggcct cgccgcaggc catctctcca gacctgggct caccctgccg ctgtgctgtt
 120
 gcctttggct ggaattccac ccagccttc ttgctcaag aacgcccttc ccccttcaga
 180

tctcatgggc acagggcccc tcttcctaaa cggggtcaga gccccagta atcatgacaa
 240
 agaccctctc ctgcagcaag ctttgggtcaa gctcctaccc
 280

<210> 2070
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 2070
 Met Val Glu Thr Val Arg Val Gln Gly Val Pro Glu Pro Ser Leu Gly
 1 5 10 15
 Cys Met Gly Pro Arg Arg Pro Ser Leu Gln Thr Trp Ala His Pro
 20 25 30
 Ala Pro Val Leu Leu Pro Leu Ala Gly Ile Pro Pro Gln Pro Ser Cys
 35 40 45
 Leu Lys Asn Ala Leu Pro Pro Ser Asp Leu Met Gly Thr Gly Pro Val
 50 55 60
 Phe Leu Asn Gly Val Arg Ala Pro Ser Asn His Asp Lys Asp Pro Leu
 65 70 75 80
 Leu Asp Gln Ala Leu Val Lys Leu Leu Pro
 85 90

<210> 2071
 <211> 399
 <212> DNA
 <213> Homo sapiens

<400> 2071
 acgcgtgtcc agcagactta gaaagcaggt tcctcttgtc atacagcacg ttaacatagc
 60
 tgacgaggcc tgggtgtctt catcagtact gtgatgactc ttacaccttt gacttcagat
 120
 gctggcgctt ttactttttt gtgccaaact ctacacatga aacacttttg gaataactac
 180
 agacatgact ttctttatct ggggaaaagg agggcattaa accagattag gggctgggag
 240
 gggagggttg caggggatga gctgctcctg aggaagaggg agagatcaag cttcactcag
 300
 cagctggatt ctcacctagt ttatagactg aaatcctgca aggtggttac aacagtgaac
 360
 aatattgtca tacataaaga ctctaccctc aggtgatca
 399

<210> 2072
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 2072
 Met Thr Leu Ser Pro Leu Thr Ser Asp Ala Gly Ala Phe Tyr Phe Leu
 1 5 10 15
 Cys Gln Thr Leu His Met Lys His Phe Trp Asn Asn Tyr Arg His Asp


```

                20                25                30
Phe Leu Tyr Leu Gly Lys Arg Arg Ala Leu Asn Gln Ile Arg Gly Trp
      35                40                45
Glu Gly Arg Leu Ser Gly Asp Glu Leu Leu Leu Arg Lys Arg Gln Arg
      50                55                60
Ser Ser Phe Thr Gln Gln Leu Asp Ser His Leu Val Tyr Arg Leu Lys
      65                70                75                80
Ser Cys Lys Val Val Thr Thr Val Asn Asn Met Phe Ile His Lys Asp
      85                90                95
Ser Thr Leu Arg
      100

```

<210> 2073

<211> 339

<212> DNA

<213> Homo sapiens

<400> 2073

```

ggatccactt ctgtgccttt ccagettcta gaggtgcct gcgttccttg gctcgtggcc
60
ccttcctcca cttcaagcc agcagcggag gctgagtcct ttctcatgcc atctctctgt
120
tctctctcct gcctctctct ccacactgaa ggacccctgt gatcacactg gccccccac
180
cggatgaccc aggataatcc atctccctgt ttgaaggctg gctgattagc aaccttcatt
240
ccatctgcct ccttcattcc ccttggccat gtaatgggat tcacagcttc tggggattag
300
gacatggaca tcttgtggcg ggggcataat tctgtcgac
339

```

<210> 2074

<211> 85

<212> PRT

<213> Homo sapiens

<400> 2074

```

Met Lys Glu Ala Asp Gly Met Lys Val Ala Asn Gln Pro Thr Phe Lys
  1                5                10                15
Gln Gly Asp Gly Leu Ser Trp Val Ile Arg Trp Gly Gly Gln Cys Asp
      20                25                30
His Arg Gly Pro Ser Val Trp Arg Arg Gln Glu Arg Glu Gln Arg
      35                40                45
Asp Gly Met Arg Arg Thr Gln Ala Ser Ala Ala Gly Leu Lys Val Glu
      50                55                60
Glu Gly Ala Thr Ser Gln Gly Thr Gln Ala Ala Ser Arg Ser Trp Lys
      65                70                75                80
Gly Thr Glu Val Asp
      85

```

<210> 2075

<211> 481

<212> DNA

<213> Homo sapiens

<400> 2075

ntggccagggt tgacctcaaa ggtgtacatt gttttatgtg gcgacaatgg actgtcagaa
 60
 accaaggagc tctctgtcc agagaagtcc ctgtttgaaa ggaattccag acacaccttt
 120
 atcctgagcg ctccctgccca actgggcctg ctgaggaaga tccgcctctg gcacgacagc
 180
 cgtgggcctt ccccgagctg gttcatcagc cacgtgatgg tgaaggagct gcacacggga
 240
 cagggctggg tcttccctgc ccagtgtctg ctgtctgccg gcaggcatga tggtcgctg
 300
 gagcgggagc tcacctgtct gcaaggggga ctcggtctct ggaagctttt ctattgcaag
 360
 ttcacagagt acctggagga ttccatgtc tggctgtcgg tgtacagcag gccctctctc
 420
 agccgctacc tgcacacgcc gcgccccacc gtgtctctct cctgtctgtg cgtctacgcg
 480
 t
 481

<210> 2076

<211> 160

<212> PRT

<213> Homo sapiens

<400> 2076

Xaa	Ala	Arg	Leu	Thr	Ser	Lys	Val	Tyr	Ile	Val	Leu	Cys	Gly	Asp	Asn
1				5					10					15	
Gly	Leu	Ser	Glu	Thr	Lys	Glu	Leu	Ser	Cys	Pro	Glu	Lys	Ser	Leu	Phe
			20					25					30		
Glu	Arg	Asn	Ser	Arg	His	Thr	Phe	Ile	Leu	Ser	Ala	Pro	Ala	Gln	Leu
		35				40						45			
Gly	Leu	Leu	Arg	Lys	Ile	Arg	Leu	Trp	His	Asp	Ser	Arg	Gly	Pro	Ser
		50				55				60					
Pro	Gly	Trp	Phe	Ile	Ser	His	Val	Met	Val	Lys	Glu	Leu	His	Thr	Gly
65				70						75				80	
Gln	Gly	Trp	Phe	Phe	Pro	Ala	Gln	Cys	Trp	Leu	Ser	Ala	Gly	Arg	His
			85						90					95	
Asp	Gly	Arg	Val	Glu	Arg	Glu	Leu	Thr	Cys	Leu	Gln	Gly	Gly	Leu	Gly
			100					105					110		
Phe	Trp	Lys	Leu	Phe	Tyr	Cys	Lys	Phe	Thr	Glu	Tyr	Leu	Glu	Asp	Phe
		115					120					125			
His	Val	Trp	Leu	Ser	Val	Tyr	Ser	Arg	Pro	Ser	Ser	Ser	Arg	Tyr	Leu
		130				135					140				
His	Thr	Pro	Arg	Pro	Thr	Val	Ser	Phe	Ser	Leu	Leu	Cys	Val	Tyr	Ala
145					150					155					160

<210> 2077

<211> 1410

<212> DNA

<213> Homo sapiens

<400> 2077

ncagagtgtt ttgagctatc tggatatcca aatgatgtga atacttttcag aaaccaatgg
 60
 caaattgaac ccaactgttt gcgaattcgg cacgagtaaa gatctttttt ttttttttgt
 120
 tttttttttt tttttttttt ttttgccttc taaagtggct ttaatatac acaagcggct
 180
 ctttggctca cagtgaagaa aaacagaggg agccaggaaa ggctccccg tggcctctgg
 240
 agtccaggag ccttaggaag gctgaaacaa gccctgacca gcaggcttag ttgtctctgag
 300
 aagagccagt gaggccacct ggtccagttc accaggtttc ccagggaagc acaggcatct
 360
 ctgggtcccc gagcacagtg ccagggaaga ccccccaat ccccatctga acaggccgag
 420
 ggcagctagg gaaaggctca gactgcaggt tcaccccgca ggatggaag gacacgtgct
 480
 cctccctcgc aagagcaggc ttgtgcacag cccggcacag ggcagccag ggcggccccct
 540
 gcggtctgtc agcgtctacc agggggaggga gttcagccat caggaccttt tccaagtggg
 600
 tctgctgggt cagcacagcc actcgcagct tgaggggccg cagggtctgc agctcctggg
 660
 tgctggagta gacaagcagc tgggnnggct ccatgcaggc tccgctctac cccacaggga
 720
 cggcgagggt ccgggggggc tnnccccaca gacatggtct tggtggtgt tccgccaccg
 780
 ctgcacgcag ctctgcagc ctgtgcagac actggccac catggcctgc agcccccca
 840
 gcgtgagcag gcagcggtac tcctgcatcc agtccatggg ggctgctgag agctcctccc
 900
 tcatgcgcag tctcagcagc gagcaggcct tccgcaggcg ccccgccctcc gcctccacct
 960
 ccacagcact gagcctgggc tggggcccgc ctgaagctgt ctgcagtgtc tggaggaaat
 1020
 ggggttttgc agcggcgcca tccgtggaat cactgggtctg tgtggaactg agctggggcc
 1080
 acaggctcga gttctgggaa gctgctttcc tgaatgccgc aggcagccgc agcagggtcc
 1140
 ccttctcctt gagtgtgaag gcttctgggg cctgaggagc agcggtatgg gccatttgc
 1200
 ggtccctgag gccccccca ggcctggggg ttcgggtccc catccaaca cgggtcccat
 1260
 cccccactga cagcagccgg cgtcagggt ggcccttggc aggcaccgtg gtctggcgga
 1320
 ggcccttggg gggtctctgt tctgaagcat ggccaccagc ttggcctggg gaatgcggtg
 1380
 gggcggaggc tgtcgtgcca gaagaggtga
 1410

<210> 2078

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2078

Gly His Leu Val Gln Phe Thr Arg Phe Pro Arg Glu Ala Gln Ala Ser
 1 5 10 15
 Leu Gly Pro Arg Ala Gln Cys Gln Gly Arg His Pro Gln Ser Pro Ser
 20 25 30
 Glu Gln Ala Glu Gly Ser Met Gly Lys Ala Gln Thr Ala Gly Ser Ser
 35 40 45
 Arg Arg Met Val Arg Thr Arg Ala Pro Pro Ser Gln Glu Gln Ala Cys
 50 55 60
 Ala Gln Pro Gly Thr Gly Pro Ala Arg Ala Ala Pro Ala Ala Val Gln
 65 70 75 80
 Arg Leu Pro Gly Gly Gly Val Gln Pro Ser Gly Pro Phe Pro Ser Gly
 85 90 95
 Ser Ala Gly Pro Ala Gln Pro Leu Ala Ala
 100 105

<210> 2079

<211> 565

<212> DNA

<213> Homo sapiens

<400> 2079

atttacctcg caaccgaccc tgatcgtgaa ggtgaaagca tcagctggca catccagcag
 60
 gtactggcgg tcaaatccta caaacgcatt accttcaacg agatcactct caagcgcgtt
 120
 gaagaggcac tggccaatcc tcgacaaatc gatctgaaca gagttgcctc acaggaatgc
 180
 cggcgtgtgc ttgaccgctt ggtgggggtac ctgggtgaccc aagagttgcg gcgcctgatg
 240
 ggcaaaccta ctcccgctgg ccgcgttcaa tcaccgcgcg tggttcttgt ggtcttgccg
 300
 gaacgcgaga tccgcaactt tcaggtgacg aatcactttg cgcgtgcgtct gttctttgcc
 360
 gatgtaagtc ggggcaccac ttggtatgcc gagtggcaac cggtaccgga tttcgcaagc
 420
 aagcacttcc cctatgttca ggatagcaac ctggtcagc acgtcgccgg cactcgaaat
 480
 gtggctcgtg agtctcgga ggatcgcaag gccgagcgtc atctctctgc accattcatc
 540
 tcattccactc ttcaacaggc cgcca
 565

<210> 2080

<211> 188

<212> PRT

<213> Homo sapiens

<400> 2080

Ile Tyr Leu Ala Thr Asp Pro Asp Arg Glu Gly Glu Ser Ile Ser Trp
 1 5 10 15
 His Ile Gln Gln Val Leu Ala Val Lys Ser Tyr Lys Arg Ile Thr Phe
 20 25 30
 Asn Glu Ile Thr Leu Lys Arg Val Glu Glu Ala Leu Ala Asn Pro Arg

```

          35              40              45
Gln Ile Asp Leu Asn Arg Val Ala Ser Gln Glu Cys Arg Arg Val Leu
   50              55              60
Asp Arg Leu Val Gly Tyr Leu Val Thr Gln Glu Leu Arg Arg Leu Met
   65              70              75
Gly Lys Pro Thr Ser Ala Gly Arg Val Gln Ser Pro Ala Val Phe Leu
          85              90              95
Val Val Leu Arg Glu Arg Glu Ile Arg Asn Phe Gln Val Ile Asn His
          100              105              110
Phe Gly Val Arg Leu Phe Phe Ala Asp Val Ser Arg Gly Thr Thr Trp
          115              120              125
Tyr Ala Glu Trp Gln Pro Val Pro Asp Phe Ala Ser Lys His Phe Pro
          130              135              140
Tyr Val Gln Asp Ser Asn Leu Ala Gln His Val Ala Gly Thr Arg Asn
          145              150              155
Val Val Val Glu Ser Cys Glu Asp Arg Lys Ala Glu Arg His Pro Pro
          165              170              175
Ala Pro Phe Ile Ser Ser Thr Leu Gln Ala Ala
          180              185

```

<210> 2081

<211> 319

<212> DNA

<213> Homo sapiens

<400> 2081

```

aagcttatgg aaaaacgggg atacggagag gagtatataa atcgctataa aatgatgaca
60
aggttccatc atcaacgggt tccactagta attttggtgt gtggaactgc ctgtactgga
120
aaatcaacaa tcgtacaca acctgctcag aggetcaatt tgcctaattgt ttgacagacg
180
gacatggtgt atgagctgct gccgacatca acagatgcgc cacttacttc agttcctgtg
240
tggtctcgcg attttaattc acctgaagag cttatcactg aattctgcag agaatgcaga
300
gttgtagcga agggtttgg
319

```

<210> 2082

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2082

```

Lys Leu Met Glu Lys Arg Gly Tyr Gly Glu Glu Tyr Ile Asn Arg Tyr
   1           5           10           15
Lys Met Met Thr Arg Phe His His Gln Arg Val Pro Leu Val Ile Leu
          20           25           30
Val Cys Gly Thr Ala Cys Thr Gly Lys Ser Thr Ile Ala Thr Gln Leu
          35           40           45
Ala Gln Arg Leu Asn Leu Pro Asn Val Leu Gln Thr Asp Met Val Tyr
          50           55           60
Glu Leu Leu Arg Thr Ser Thr Asp Ala Pro Leu Thr Ser Val Pro Val

```

```

65              70              75              80
Trp Ala Arg Asp Phe Asn Ser Pro Glu Glu Leu Ile Thr Glu Phe Cys
            85              90              95
Arg Glu Cys Arg Val Val Arg Lys Gly Leu
            100              105

```

```

<210> 2083
<211> 382
<212> DNA
<213> Homo sapiens

```

```

<400> 2083
nngcctgatt ggcacatggc cgtcgagtgc gctgtaacac gcaagcagct atataccatc
60
atacctactg ttgaatgcaa ctgtggccac gttttctgct ttggctgtgg ttgggatgga
120
caccagccgg tcatttgtgc tgttgtccgc ttgtggctga aaaaatgtgc ggaatgacagt
180
gagacgtcca actggatcgg cgctaatacc aaggaatgcc ccaaatgctg ttcgacgatt
240
gaaaagaatg gcggatgtaa tcatatgacg tgtcgcaagt gcaaatacga attttgtgtg
300
atttgcctcg gcccatggtc ggagcacgga aacaactatt acaactgcaa tcggtacgatt
360
gaaaaggcag gagatgaagg tn
382

```

```

<210> 2084
<211> 127
<212> PRT
<213> Homo sapiens

```

```

<400> 2084
Xaa Pro Asp Cys Asp Met Ala Val Glu Cys Ala Val Thr Arg Lys Gln
1      5      10      15
Leu Tyr Thr Ile Ile Pro Thr Val Glu Cys Asn Cys Gly His Val Phe
20     25     30
Cys Phe Gly Cys Gly Leu Asp Gly His Gln Pro Val Ile Cys Ala Val
35     40     45
Val Arg Leu Trp Leu Lys Lys Cys Ala Asp Asp Ser Glu Thr Ser Asn
50     55     60
Trp Ile Gly Ala Asn Thr Lys Glu Cys Pro Lys Cys Cys Ser Thr Ile
65     70     75     80
Glu Lys Asn Gly Gly Cys Asn His Met Thr Cys Arg Lys Cys Lys Tyr
85     90     95
Glu Phe Cys Trp Ile Cys Ser Gly Pro Trp Ser Glu His Gly Asn Asn
100    105    110
Tyr Tyr Asn Cys Asn Arg Tyr Asp Glu Lys Ala Gly Asp Glu Gly
115    120    125

```

```

<210> 2085
<211> 478
<212> DNA
<213> Homo sapiens

```

<400> 2085
 nnggateccca aagaccgcga tattgccatg gtgttccaaa actatgcctt ctaccgcac
 60
 atgactgtcg cgcacaacat ggggttttgc ctcaaatgg cgaaagtggg taagaaagaa
 120
 atccggcgctc gcgtggagga agccgcgcaa ctctcgacc tcaccgacta tctggaccgc
 180
 aaacccaagg cactctccgg tggccagcgg cagcgcgctc ccatggggcg cgctattggt
 240
 cgttcccccc gcgtcttctt gatggacgag cctctttcta acctggatgc gcgtctgcgt
 300
 gtccgcaccc gcgcccagat tgcggaactg cagcgccgcc tgggcaccac caccgtttat
 360
 gtcacccatg accaggtgga ggctatgacg atgggggatc gtgtggctgt tctctgtgcc
 420
 gggaaactgc agcaggtgga tactccacgt aatcttttcg accaccccg taacgcgt
 478

<210> 2086
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 2086
 Xaa Asp Pro Lys Asp Arg Asp Ile Ala Met Val Phe Gln Asn Tyr Ala
 1 5 10 15
 Leu Tyr Pro His Met Thr Val Ala Asp Asn Met Gly Phe Ala Leu Lys
 20 25 30
 Leu Ala Lys Val Asp Lys Lys Glu Ile Arg Arg Arg Val Glu Glu Ala
 35 40 45
 Ala Glu Leu Leu Asp Leu Thr Asp Tyr Leu Asp Arg Lys Pro Lys Ala
 50 55 60
 Leu Ser Gly Gly Gln Arg Gln Arg Val Ala Met Gly Arg Ala Ile Val
 65 70 75 80
 Arg Ser Pro Arg Val Phe Leu Met Asp Glu Pro Leu Ser Asn Leu Asp
 85 90 95
 Ala Arg Leu Arg Val Arg Thr Arg Ala Gln Ile Ala Glu Leu Gln Arg
 100 105 110
 Arg Leu Gly Thr Thr Thr Val Tyr Val Thr His Asp Gln Val Glu Ala
 115 120 125
 Met Thr Met Gly Asp Arg Val Ala Val Leu Cys Ala Gly Lys Leu Gln
 130 135 140
 Gln Val Asp Thr Pro Arg Asn Leu Phe Asp His Pro Ala Asn Ala
 145 150 155

<210> 2087
 <211> 731
 <212> DNA
 <213> Homo sapiens

<400> 2087
 gataattctc tacacggcat gagctgggga cgtaccccc ttgccaacgt cacctcacgg
 60

tcgtaccgtg gtgattagca gctagccgag gcgctagccg ccatataaga ttcccaaatt
 120
 aaaagaaaaa gcattgcgtc ggccaagaat tgctgtcgct gctgcaacgg ctactgcgt
 180
 ggctcgatca atcgcagcaa tcaccccctc cccagggcag aagctaactc caataggcca
 240
 cgctcggtag ctcaagccgc tatcgccacg gatggaaagg ggaataatcaa caaggactgc
 300
 cgtgatgcag tcatcaacga tgcaaagctg cgtgccgcga ttgccgggtgc gttgggttaa
 360
 gctcgattta gttccgcga cgcggtggct ctagccgcgc gtattgccag agaaatggca
 420
 aaagaggggc tcctcctcat caaccaccac aagctaaagg ctctcatcgg agcccagggtg
 480
 ggtctgctca ctgatgcgaa gatccagcgt gctgccgctg cagtggacct cggcatcaaa
 540
 gccactctag ctgcgacaat cattcccaac gcgctgcatt cagcggcatt caaggatgcg
 600
 gtggctcgaa atcttgtcgc cgccgggtctg acaagaagtt ggcaaaggct acgctgtcgtg
 660
 ccattgcgcg aactgcgctc aatcccgctc tcgggccgat cgcaaagact gaggccatta
 720
 aggctgagat c
 731

<210> 2088

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2088

Met	Ala	Lys	Glu	Gly	Val	Leu	Leu	Ile	Asn	His	His	Lys	Leu	Lys	Ala
1				5				10					15		
Leu	Ile	Gly	Ala	Gln	Val	Gly	Leu	Leu	Thr	Asp	Ala	Lys	Ile	Gln	Arg
		20					25						30		
Ala	Ala	Ala	Ala	Val	Asp	Leu	Gly	Ile	Lys	Ala	Thr	Leu	Ala	Ala	Thr
		35				40						45			
Ile	Ile	Pro	Asn	Ala	Leu	His	Ser	Ala	Ala	Phe	Lys	Asp	Ala	Val	Val
	50				55						60				
Ala	Asn	Leu	Val	Ala	Ala	Gly	Leu	Thr	Arg	Ser	Trp	Gln	Arg	Leu	Arg
65				70					75				80		
Leu	Ser	Pro	Leu	Pro	Gln	Leu	Arg	Ser	Ile	Pro	Leu	Ser	Gly	Arg	Ser
		85						90					95		
Gln	Arg	Leu	Arg	Pro	Leu	Arg	Leu	Arg							
		100						105							

<210> 2089

<211> 315

<212> DNA

<213> Homo sapiens

<400> 2089

accggtgtgg accagggtca gctgcgcgac gccatgtttt cctaccttcc ccaccacaag
 60

ctcggggaat tcgacatcga tctgttgctg gaccatcgcg attcccgta gcccatcatc
 120
 ttcgacacgg accacttcga ggggtacgag cgccccgcc tcgtgtgca cgaagtcacc
 180
 gatcaacttg gccaaagcgt ccttgattg gaaggccag agccggctct cggctgggaa
 240
 tcgttggtgg cgtctctcac gagtctgtc gactctatgg ggatccgtct gaccggcatt
 300
 accgattcga tcccg
 315

<210> 2090

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2090

Thr	Gly	Val	Asp	Gln	Ala	Gln	Leu	Arg	Asp	Ala	Met	Phe	Ser	Tyr	Leu
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Pro	His	His	Lys	Leu	Gly	Glu	Phe	Asp	Ile	Asp	Leu	Leu	Leu	Asp	His
			20				25						30		
Arg	Asp	Ser	Arg	Gln	Pro	Ile	Ile	Phe	Asp	Thr	Asp	His	Phe	Glu	Gly
			35				40					45			
Tyr	Glu	Arg	Pro	Arg	Leu	Val	Leu	His	Glu	Val	Thr	Asp	Gln	Leu	Gly
	50					55				60					
Gln	Ala	Phe	Leu	Val	Leu	Glu	Gly	Pro	Glu	Pro	Ala	Leu	Gly	Trp	Glu
65				70					75					80	
Ser	Leu	Val	Ala	Ser	Leu	Thr	Ser	Leu	Val	Asp	Ser	Met	Gly	Ile	Arg
				85					90					95	
Leu	Thr	Gly	Ile	Thr	Asp	Ser	Ile	Pro							
			100				105								

<210> 2091

<211> 322

<212> DNA

<213> Homo sapiens

<400> 2091

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 tgtgtccctg tccagttctg tnnctgtgtg tgcgcgcac tctctctgtg tctctgtgng
 120
 agtctctgtc ttttttgtct ctgtctctct ctgtgtctct gccattttg gtctctgctt
 180
 tcttctctct gtgtgtctct ccatttctgt ctctctctct ctgtctctct ccatttctgt
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 ctctgtctct tttctctctg tgtgtctctt ttgtctctct gtttctctgc gtgtctctgt
 300
 ccatttctgt cccttcacgc gt
 322

<210> 2092

<211> 107

<212> PRT

<213> Homo sapiens

<400> 2092

```

Thr Leu Val His Cys Leu Cys Leu Cys Val Phe Leu Ser Val Ser Leu
1          5          10          15
Cys Leu Cys Leu Cys Val Pro Val Gln Phe Cys Xaa Cys Val Cys Ala
20          25          30
His Leu Ser Leu Cys Leu Cys Xaa Ser Leu Cys Leu Phe Cys Leu Cys
35          40          45
Leu Ser Leu Cys Leu Cys Pro Phe Trp Ser Leu Leu Ser Phe Leu Cys
50          55          60
Val Ser Leu His Phe Cys Leu Ser Ser Ser Val Ser Leu His Phe Cys
65          70          75          80
Leu Cys Ser Phe Ser Leu Cys Val Ser Leu Leu Ser Leu Cys Phe Ser
85          90          95
Ala Cys Leu Cys Pro Phe Leu Ser Leu His Ala
100          105

```

<210> 2093

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2093

```

gccggcggtca tcgaacacgat caaggtggcg caatttcgcc tctgccatag tcgaaaaaatg
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tttggtggtgg cctaccgcg agagaccacg gagatggtgc tcgatgcgca taaccgcgcc
120
tttgcgttct ttggcggcgt accgcagcgg gttatctacg acaaccttaa aaccgcagtg
180
gatgcgatct tggtcggcaa ggatcgaatc ttcaaccggc gcttcctggc gttggctaata
240
cattacctgt ttgaacctgt agcctgtacg cctgctgctg gctgggagaa gggccaagtt
300
gagaatcaag ttcgcaacat acgc
324

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<210> 2094

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2094

```

Ala Gly Val Met Gln Thr Ile Lys Val Ala Gln Phe Arg Leu Cys His
1          5          10          15
Ser Arg Lys Met Phe Val Val Ala Tyr Pro Arg Glu Thr Gln Glu Met
20          25          30
Val Leu Asp Ala His Asn Arg Ala Phe Ala Phe Gly Gly Val Pro
35          40          45
Gln Arg Val Ile Tyr Asp Asn Leu Lys Thr Ala Val Asp Ala Ile Leu
50          55          60
Val Gly Lys Asp Arg Ile Phe Asn Arg Arg Phe Leu Ala Leu Ala Asn
65          70          75          80
His Tyr Leu Phe Glu Pro Val Ala Cys Thr Pro Ala Ala Gly Trp Glu

```

```

      85              90              95
Lys Gly Gln Val Glu Asn Gln Val Arg Asn Ile Arg
      100              105

<210> 2095
<211> 402
<212> DNA
<213> Homo sapiens

<400> 2095
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60
accctgcccc ccgcccga aa tcttctgctt aaacaattcc atattgtgga tgttgccccg
120
cgcggtggtg gcgtgggttc agtgggcacc cactccctgg tactgtact gtcggcccc
180
aatgatgaac ctcttgtgct gcaagtga aa gaagccctcc ccagtgtcct caccacccat
240
gggaaactgc cggatgcttt ttcggaactg tccgctgggg actcctccgg gtcctcccc
300
gataatcttg ataagcatat taaagccggc aatggctacc ggggtggtggc gtgccagcag
360
attctgcagg ccactcgga tccgctgctg gggtagacgc gt
402

<210> 2096
<211> 134
<212> PRT
<213> Homo sapiens

<400> 2096
Pro Val Thr Asp Gln Glu Glu Ala Asp Asn Met Ile Ala Ser Phe Asp
1 5 10 15
Thr Tyr Val Arg Thr Leu Pro Pro Ala Ala Asn Leu Leu Leu Lys Gln
20 25 30
Phe His Ile Val Asp Val Ala Arg Arg Val Val Gly Val Gly Ser Val
35 40 45
Gly Thr His Ser Leu Val Leu Leu Leu Ser Gly Pro Asn Asp Glu Pro
50 55 60
Leu Val Leu Gln Val Lys Glu Ala Leu Pro Ser Val Leu Thr Thr His
65 70 75 80
Gly Lys Leu Pro Asp Ala Phe Ser Glu Leu Ser Ala Gly Asp Ser Ser
85 90 95
Gly Leu Leu Pro Asp Asn Leu Asp Lys His Ile Lys Ala Gly Asn Gly
100 105 110
Tyr Arg Val Val Ala Cys Gln Gln Ile Leu Gln Ala His Ser Asp Pro
115 120 125
Leu Leu Gly Trp Thr Arg
130

<210> 2097
<211> 641
<212> DNA
<213> Homo sapiens

```

<400> 2097
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 120
 gccatgagca aggaggaggc cgaccaggta ctgggcgtgc agctggggct gtctgtccgc
 180
 caccgcctcc cagcctcac ttcaggctcc ctcccagcca ggcgtgggccc tggccctcac
 240
 tgctcgtgct ccacatgctg tcaactcgtct cctccccagt cctgcctcat cctcaacnccg
 300
 cgtccctct gcgtgtcact ctctgcctgt cctcactggt tcagggaacc ccagcctctc
 360
 tttattcgge tctatctgac cctggctctg cctctgactc tgcctctggc cctcccgctc
 420
 atgccccctca cactctctct cccccagccc cgtcctgcg gccccgagga cgagcggcag
 480
 ctccagctgg ccttagttt gagccgagaa gagcatgata aggtcagagc agcctccctg
 540
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 600
 cccaccatcc tgctggggccc gaagcccaca ggctcacgct t
 641

<210> 2098
 <211> 213
 <212> PRT
 <213> Homo sapiens

<400> 2098
 Xaa Phe Leu Thr Arg Pro Pro Ala Ser Ser Ala Ala Val Gly Ser Gly
 1 5 10 15
 Pro Pro Pro Glu Ala Glu Gln Ala Trp Pro Gln Ser Ser Gly Glu Glu
 20 25 30
 Glu Leu Gln Leu Gln Leu Ala Leu Ala Met Ser Lys Glu Glu Ala Asp
 35 40 45
 Gln Val Leu Gly Val Gln Leu Gly Leu Ser Val Arg His Pro Pro Pro
 50 55 60
 Arg Leu Thr Ser Gly Ser Leu Pro Ala Arg Arg Gly Pro Gly Pro His
 65 70 75 80
 Cys Arg Cys Ser Thr Cys Cys His Ser Ser Pro Pro Gln Ser Cys Leu
 85 90 95
 Ile Leu Thr Pro Pro Ser Leu Cys Val Ser Leu Ser Ala Cys Pro His
 100 105 110
 Trp Phe Arg Asp Pro Gln Pro Leu Phe Ile Arg Leu Tyr Leu Thr Leu
 115 120 125
 Ala Leu Pro Leu Thr Leu Pro Leu Ala Pro Pro Val Met Pro Leu Thr
 130 135 140
 Leu Ser Leu Pro Gln Pro Pro Ser Cys Gly Pro Glu Asp Asp Ala Gln
 145 150 155 160
 Leu Gln Leu Ala Leu Ser Leu Ser Arg Glu Glu His Asp Lys Val Arg
 165 170 175
 Ala Ala Ser Leu Ser Leu Pro Leu Pro Gly Ala Pro Leu Arg Pro Ala

```

          180          185          190
Pro Ser Pro Leu Pro Lys Ser Pro Pro Thr Ile Leu Leu Gly Pro Lys
      195          200          205
Pro Thr Gly Ser Arg
      210

```

```

<210> 2099
<211> 347
<212> DNA
<213> Homo sapiens

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<400> 2099
acgcgtgtgc cctgtcccct gccagacatg gacagcacct gcccacaggg gtgctcagtg
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gaggcagtg ccagggtctg tgtgcccatg cgtgtaccct gtccctctgc agacgcggac
120
agcacctgcc caccgggtgc tcagtggagg cagtgtccag ggctgctgtg cccacgtgtg
180
tgccctcaga catccctccc cagacacttg ctgcatgacc caggagggtg caggcagtggtg
240
cagtattctg ttcaggtgag ctacagagtg gcagggtgct ggctgcggcc ctgcctcact
300
ccgacagcct ctgcctccag tccactggct catccacat ggctcta
347

```

```

<210> 2100
<211> 106
<212> PRT
<213> Homo sapiens

```

```

<400> 2100
Met Asp Ser Thr Cys Pro Gln Gly Cys Ser Val Glu Ala Val Pro Arg
1      5      10      15
Ala Ala Val Pro Met Arg Val Pro Cys Pro Leu Pro Asp Ala Asp Ser
20      25      30
Thr Cys Pro Arg Gly Ala Gln Trp Arg Gln Cys Pro Gly Leu Leu Cys
35      40      45
Pro Arg Val Cys Pro Gln Thr Ser Leu Pro Arg His Leu Leu His Asp
50      55      60
Pro Gly Gly Gly Arg Gln Trp Gln Tyr Ser Val Gln Val Ser Ser Glu
65      70      75      80
Val Ala Gly Ala Trp Leu Arg Pro Cys Leu Thr Pro Thr Ala Ser Ala
85      90      95
Ser Ser Pro Leu Ala His Pro Thr Trp Pro
100      105

```

```

<210> 2101
<211> 549
<212> DNA
<213> Homo sapiens

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```

<400> 2101
ctctctcga ccgcgttgac ggtccagccg gtccgcacgc cgtcatcgga atcggcacga
60

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acgttttcgat ggggcgtgac gaattgcccc tgccgacggc gacctctctg gctctgtgtg
 120
 gggtgaacca cgacaagaat gagttgtggg ccagccttct catccaccctt gacgagctat
 180
 taacagtgtg gttggagacc ggaacgggtg gggatcagta tgtggcccgc tgtgacacca
 240
 ttggtactec ggtccgtctg accttcgacc cagaaatcgt ggggtgggtg gagggggcca
 300
 ttgaggcat cggtgtcgac gttgacgttg atggcgctat cgtggtggaa acttctgacg
 360
 ggcgctcgag tttaacgct gctgacgttc atcatttgcg aaccagggtga gttccgctac
 420
 ggcgtcctga gcgttccac catctagact gctgactatg acgaccacaca ttttggccct
 480
 tgggtgggtggc ggtttctcga tgcgaaccg cgggtgagcct accgctctcg accgtcacat
 540
 ccctgacct
 549

<210> 2102
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 2102
 Met Gly Arg Asp Glu Leu Pro Leu Pro Thr Ala Thr Ser Leu Ala Leu
 1 5 10 15
 Cys Gly Leu Asn His Asp Lys Asn Glu Leu Leu Ala Ser Leu Leu Ile
 20 25 30
 His Leu Asp Glu Leu Leu Thr Val Trp Leu Glu Thr Gly Thr Val Arg
 35 40 45
 Asp Gln Tyr Val Ala Arg Cys Asp Thr Ile Gly Thr Pro Val Arg Leu
 50 55 60
 Thr Phe Asp Pro Glu Ile Val Gly Gly Gly Glu Gly Ala Ile Glu Gly
 65 70 75 80
 Ile Gly Val Asp Val Asp Val Asp Gly Ala Ile Val Val Glu Thr Ser
 85 90 95
 Asp Gly Arg Arg Ser Phe Asn Ala Ala Asp Val His His Leu Arg Thr
 100 105 110
 Arg

<210> 2103
 <211> 459
 <212> DNA
 <213> Homo sapiens

<400> 2103
 nnacgcgtga cttatacacc gggacgcaat gcgacggcaa cggcagagca cactatcgcc
 60
 atgattatgg cggcagtgcg acagatcccc gccaccatg agttactcgc ttcagggggt
 120
 tgggaggggg acgcatatcg gtacgaccag gttggatgg aaatcaaagg gaatgacgtc
 180

ggtatcgtcg gatgcggagc ggtcgggtgc cgggttgctgg ctgtgatggc ggccatgggt
 240
 gcgaccgtgc gtgtcttcga cccgtggggc actcctgatt cttttccagc tggcgtgatg
 300
 gcatgtgatg atctcgatga ggttctgagg ctcagccgca tcctcactct ccacgctcgt
 360
 gccaacgagg acaaccgtca catgattggc gttgaacaat tagctgagat gcctgatggc
 420
 tccgtcctcg tcaactgtgc ccgtggctcg ctggctcgac
 459

<210> 2104

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2104

Xaa	Arg	Val	Thr	Tyr	Thr	Pro	Gly	Arg	Asn	Ala	Thr	Ala	Thr	Ala	Glu
1			5					10					15		
His	Thr	Ile	Ala	Met	Ile	Met	Ala	Ala	Val	Arg	Gln	Ile	Pro	Ala	His
		20					25					30			
His	Glu	Leu	Leu	Ala	Ser	Gly	Val	Trp	Glu	Gly	Asp	Ala	Tyr	Arg	Tyr
		35					40				45				
Asp	Gln	Val	Gly	Met	Glu	Ile	Lys	Gly	Asn	Asp	Val	Gly	Ile	Val	Gly
	50					55					60				
Cys	Gly	Ala	Val	Gly	Cys	Arg	Val	Ala	Ala	Val	Met	Ala	Ala	Met	Gly
65					70				75					80	
Ala	Thr	Val	Arg	Val	Phe	Asp	Pro	Trp	Ala	Thr	Pro	Asp	Ser	Phe	Pro
			85					90					95		
Ala	Gly	Val	Met	Ala	Cys	Asp	Asp	Leu	Asp	Glu	Val	Leu	Arg	Leu	Ser
		100					105						110		
Arg	Ile	Leu	Thr	Leu	His	Ala	Arg	Ala	Asn	Glu	Asp	Asn	Arg	His	Met
		115					120					125			
Ile	Gly	Val	Glu	Gln	Leu	Ala	Glu	Met	Pro	Asp	Gly	Ser	Val	Leu	Val
	130					135					140				
Asn	Cys	Ala	Arg	Gly	Ser	Leu	Val	Asp							
145						150									

<210> 2105

<211> 4057

<212> DNA

<213> Homo sapiens

<400> 2105

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 120
 cccctatatg gctccagtcg gttttggggg gggcagctaa gtgggggagg gggaacacaa
 180
 aagtttgggc aaaacattaa cctgacaaa cttgattccg gaaaaaaatc cctcaagagc
 240
 gcaaggccag cttagccaac tggcagctga gtggaaaggt tcagtcctct cgggcagctc
 300

cggtggcacc tagaggggag aggggtgcagg ctttgaagcc agaaagacat gsgatgcaagt
360
cttactttgc ttcttgcctgt taccagttgg cctgacctta ggaatgtta tttaatctct
420
ctccagttgt tccccctgga gaaagccctg tcagcctgag gatccaagac gcgtacgtaa
480
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540
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660
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720
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780
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840
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1260
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1860
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1920

ctttatatca attatacatt taatataatt taatttataaa taattttaaag attcttagga
1980
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2340
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2640
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2700
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2820
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3180
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3240
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3300
gagcaagggc ctgaggggtc tctgtcactg ttactggcag aagaaacaca gcagggtgtt
3360
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3420
ttgaacttaa gggaaaaaat tagtaacaaa attcccagca tcagtatgaa catattttat
3480
ttgcctaaac aagctttgtg aaagttaagc gttcaaacac cagtgtcagt tacctggaag
3540

gctactaagg taaataagca aagcaggcca gttgtcagga aagcagagat tgtgcctggg
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 3660
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 3720
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 3780
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 3840
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 3900
 gtgtatttca ttgtccttt gtatttatct aaaaggggtg atatgatttt atatcttgc
 3960
 ctctattcct aatagtatta tgacttctta tttaaaataa ataacaattg cgggttttct
 4020
 gttaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa
 4057

<210> 2106

<211> 240

<212> PRT

<213> Homo sapiens

<400> 2106

Ser Asn Gln Ser Val Phe Leu Leu Phe Ser Asp Leu Leu Pro Gln Leu
 1 5 10 15
 Glu Ala Pro Ser Ser Leu Thr Pro Ser Ser Glu Leu Ser Ser Pro Gly
 20 25 30
 Gln Ser Glu Leu Thr Asn Met Asp Leu Ala Ala Leu Phe Ser Asp Thr
 35 40 45
 Pro Ala Asn Ala Ser Gly Ser Ala Gly Gly Ser Asp Glu Ala Leu Asn
 50 55 60
 Ser Gly Ile Leu Thr Ile Asp Val Thr Ser Val Ser Ser Ser Leu Gly
 65 70 75 80
 Gly Asn Leu Pro Ala Asn Asn Ser Ser Leu Gly Pro Met Glu Pro Leu
 85 90 95
 Val Leu Val Ala His Ser Asp Ile Pro Pro Ser Leu Asp Ser Pro Leu
 100 105 110
 Val Leu Gly Thr Ala Ala Thr Val Leu Gln Gln Gly Ser Phe Ser Val
 115 120 125
 Asp Asp Val Gln Thr Val Ser Ala Gly Ala Leu Gly Cys Leu Val Ala
 130 135 140
 Leu Pro Met Lys Asn Leu Ser Asp Asp Pro Leu Ala Leu Thr Ser Asn
 145 150 155 160
 Ser Asn Leu Ala Ala His Ile Thr Thr Pro Thr Ser Ser Ser Thr Pro
 165 170 175
 Arg Glu Asn Ala Ser Val Pro Glu Leu Leu Ala Pro Ile Lys Val Glu
 180 185 190
 Pro Asp Ser Pro Ser Arg Pro Gly Ala Val Gly Gln Gln Glu Gly Ser
 195 200 205
 His Gly Leu Pro Gln Ser Thr Leu Pro Ser Pro Ala Glu Gln His Gly
 210 215 220
 Ala Gln Asp Thr Glu Leu Ser Ala Gly Thr Gly Asn Phe Tyr Leu Val

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225                230                235                240

<210> 2107
<211> 305
<212> DNA
<213> Homo sapiens

<400> 2107
gggtaccatcc ctcagcccca cccagacatg gctcaggtgc etatgttgaa tctgctccca
60
agtcctggct tggctctcgt tccagatctt aatgattctt tgagtccagt ctcaggggag
120
gcctcaggcc tgggtgtctga aaacaccccc agacctgatg acagcagagc tatcgctcca
180
gcctccctcc aaatcaccag ttcttgttct ggtgaacccc tggacctgga ttccaaggat
240
gtctcaaggc ctgactcaca ggggcgcctc tgtccagcct caaaccccat tctggcccn
300
ccncn
305

<210> 2108
<211> 92
<212> PRT
<213> Homo sapiens

<400> 2108
Met Ala Gln Val Pro Met Leu Asn Leu Leu Pro Ser Pro Gly Leu Ala
1      5      10      15
Leu Val Pro Asp Leu Asn Asp Ser Leu Ser Pro Val Ser Gly Glu Ala
20      25      30
Ser Gly Leu Val Ser Glu Asn Thr Pro Arg Pro Asp Asp Ser Arg Ala
35      40      45
Ile Ala Pro Ala Ser Leu Gln Ile Thr Ser Ser Cys Ser Gly Glu Pro
50      55      60
Leu Asp Leu Asp Ser Lys Asp Val Ser Arg Pro Asp Ser Gln Gly Arg
65      70      75      80
Leu Cys Pro Ala Ser Asn Pro Ile Leu Ala Xaa Pro
85      90

<210> 2109
<211> 700
<212> DNA
<213> Homo sapiens

<400> 2109
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60
acgtttctcca gacgtccccc agcccaggcg agtcggcaag caaaggctac gaaaagaaaa
120
taccaagcgt ccagtgaggc tccccagcg aaacggagga acgaaacttc atttctccca
180
gccaaagaaaa ctagtgttaa agaaactcag aggactttta aggggaacgc acaaaaaatg
240

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tttttccaa agaagcattc ggtagcaca agttagataga accaggagga gagacagtgc
 300
 attaagactt catcactgtt taaaaacaac cctgacattc cagaactcca cagacctgtg
 360
 gtaaagcagg tgcaagaaaa agtggtttact tcagctgctt ttcattgagct gggcctccac
 420
 ccacatttaa ttccacaat aaatacggtc ttaaaaatgt ctagtatgac cagtgttcag
 480
 aagcaaaagta ttcctgtgtt gctggaaggc agagatgctc tcgtgagatc ccagacgggc
 540
 tcaggtaaaa ttcttgcccta ttgcatccct gtggtccagt cccctcaagc aatggagtca
 600
 aaaatacagc gcagtgatgg cccctatgcc ctggtgctcg tgccaacgag agaggtaagc
 660
 aggctccctt ttgggacaag tttaagcac atgctttcat
 700

<210> 2110

<211> 233

<212> PRT

<213> Homo sapiens

<400> 2110

Xaa	Ala	Ser	Pro	Thr	Gln	Thr	Met	Ala	Ala	Ala	Asp	Gly	Ser	Leu	Phe
1				5				10						15	
Asp	Asn	Pro	Arg	Thr	Phe	Ser	Arg	Arg	Pro	Pro	Ala	Gln	Ala	Ser	Arg
			20					25					30		
Gln	Ala	Lys	Ala	Thr	Lys	Arg	Lys	Tyr	Gln	Ala	Ser	Ser	Glu	Ala	Pro
		35					40					45			
Pro	Ala	Lys	Arg	Arg	Asn	Glu	Thr	Ser	Phe	Leu	Pro	Ala	Lys	Lys	Thr
		50				55				60					
Ser	Val	Lys	Glu	Thr	Gln	Arg	Thr	Phe	Lys	Gly	Asn	Ala	Gln	Lys	Met
					70					75				80	
Phe	Ser	Pro	Lys	Lys	His	Ser	Val	Ser	Thr	Ser	Asp	Arg	Asn	Gln	Glu
				85					90					95	
Glu	Arg	Gln	Cys	Ile	Lys	Thr	Ser	Ser	Leu	Phe	Lys	Asn	Asn	Pro	Asp
			100					105					110		
Ile	Pro	Glu	Leu	His	Arg	Pro	Val	Val	Lys	Gln	Val	Gln	Glu	Lys	Val
			115				120					125			
Phe	Thr	Ser	Ala	Ala	Phe	His	Glu	Leu	Gly	Leu	His	Pro	His	Leu	Ile
			130			135					140				
Ser	Thr	Ile	Asn	Thr	Val	Leu	Lys	Met	Ser	Ser	Met	Thr	Ser	Val	Gln
				150					155					160	
Lys	Gln	Ser	Ile	Pro	Val	Leu	Leu	Glu	Gly	Arg	Asp	Ala	Leu	Val	Arg
				165					170					175	
Ser	Gln	Thr	Gly	Ser	Gly	Lys	Ile	Leu	Ala	Tyr	Cys	Ile	Pro	Val	Val
			180				185						190		
Gln	Ser	Leu	Gln	Ala	Met	Glu	Ser	Lys	Ile	Gln	Arg	Ser	Asp	Gly	Pro
			195				200					205			
Tyr	Ala	Leu	Val	Leu	Val	Pro	Thr	Arg	Glu	Val	Ser	Arg	Leu	Pro	Phe
			210			215						220			
Gly	Thr	Ser	Phe	Lys	His	Met	Leu	Ser							
225						230									

<210> 2111
 <211> 339
 <212> DNA
 <213> Homo sapiens

<400> 2111
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 caaatggaaa tcaccgcaaa ggctctgaaa aagcacggtc gcggcaacaa gctggcaatt
 120
 gccgagctgg tggccctggc tgagctgttc atgccaatca agctggtgcc gaagcaattt
 180
 gaaggcctgg ttgagcgtgt gcgcagtgct cttgagcgtc tgcgtgcccc agagcgcgca
 240
 atcatgcagc tctgcgtacg tgatgcacgc atgccgcgtg ccgacttcct gcgccagttt
 300
 ccgggcaacg aagtggatga aagctggacc gacgcactg
 339

<210> 2112
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 2112
 Thr Arg Cys Ala Gly Pro Asp Pro Ile Ile Ala Ala Gln Arg Phe Gly
 1 5 10 15
 Ala Val Ser Asp Gln Met Glu Ile Thr Arg Lys Ala Leu Lys Lys His
 20 25 30
 Gly Arg Gly Asn Lys Leu Ala Ile Ala Glu Leu Val Ala Leu Ala Glu
 35 40 45
 Leu Phe Met Pro Ile Lys Leu Val Pro Lys Gln Phe Glu Gly Leu Val
 50 55 60
 Glu Arg Val Arg Ser Ala Leu Glu Arg Leu Arg Ala Gln Glu Arg Ala
 65 70 75 80
 Ile Met Gln Leu Cys Val Arg Asp Ala Arg Met Pro Arg Ala Asp Phe
 85 90 95
 Leu Arg Gln Phe Pro Gly Asn Glu Val Asp Glu Ser Trp Thr Asp Ala
 100 105 110
 Leu

<210> 2113
 <211> 2329
 <212> DNA
 <213> Homo sapiens

<400> 2113
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 60
 atcacagtaa tctggggcgt gtccccagaa gacaatggca acccactaaa tcccaagatg
 120
 aaagggaagt tgacattaga tagcagtttt aacatcgcca gcccgcttc ccaggcctgg
 180

atattgctact tctgtcaaaa actgagaaac caaacattct ttaccagac tgatgaacag
240
gacttcacca gctgcttcat tgagacattc aaacagtgga tggaaaacca ggactgtgat
300
gagcctgcc tgtacccatg ctgcagccac tggagcttcc cctacaagca agagattttt
360
gaactgtgca tcaagagagc tatcatggag ctggaaaagga gtacagggta ccatttggat
420
agcaaaaccc cagggccgag gtttgatata aatgatacta tcagggcagt ggtgttagag
480
ttccagagta cctacctctt cactctggct tatgaaaaga tgcatacagt ttataaagag
540
gtggactcgt ggatatccag tgagctgagt tcggcccctg aaggcctcag caatggttgg
600
ttgtcagca atctggagtt ctatgacctc caggatagcc tctccgatgg caccctcatt
660
gccatggggc tgtcagttgc tgttgcatct agcgtgatgc tgcgtgacaac ttggaacatc
720
atcataagcc ttatgccat catttcaatt gctggaacga tatttgtcac tgttggttct
780
ctgtctctgc tgggctggga gctcaatgtg ttggaatctg tcaccatttc ggttgccgtc
840
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900
gaccgagaag gcaaagtgat cttctctctg agtcgctggt gctctgcgat ggccatggct
960
gccttgacca cttctgtggc aggggcatg atgattccct ccacagtctt agcttacacc
1020
cagctgggca cttcatgat gctcatcatg tgtatcagtt gggctttcgc caccctcttt
1080
ttccagtgca tgtgccggtg ccttgacca cagggtaact gtggtcagat tcttttacct
1140
aaaaaactac agtcagtgct cttttcccat gccttgtcta caagtcccag tgacaaggga
1200
caaagcaaaa cacataccat aaatgcttat catttagatc ccaggggccc aaaatctgaa
1260
ctggagcatg agttttatga attagaacct ctggcttccc acagctgcac tgcccctgag
1320
aagaccactt atgaagagac ccacatctgc tctgaatttt tcaacagcca agcaagaat
1380
ttagggatgc ctgtgcatgc agcttacaac agtgaaactca gcaaaagcac tgaaagtgc
1440
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1560
tgccagcaga tgggggactg cttgtgccac cagtgtcttc ctaccactag cagctttgtc
1620
cagatccaaa acggcgctggc acctctgaag gccacacacc aagctgtcga gggctttgtg
1680
caccctcatc cgcacatcca ccaactgtccc tgcctgcagg gcagagtaaa gccagccgga
1740
atgcagaatt ctctgcctag gaattttttc ctccaccag tgcagcacat tcaggcccaa
1800

gaaaaaattg gcaagaccaa tgtacacagt cttcagagga gcatagaaga gcattcttcca
 1860
 aagatggcag agccatcgtc atttgtctgc agaagcactg gatcggttact caaaacgtgt
 1920
 tgcgaccccg agaataaaca aaggggaactc tgtaaaaata gagacgtgag caatctggag
 1980
 agcagtgagg ggactgaaaa caaggcagga gggaaagtgg agctgagcct gtcacagacg
 2040
 gatgcaagtg tgaactcaga acatttcaat cagaatgaac caaaagtctc atttaatcat
 2100
 ttaatggggg aggctggttg taggtcttgc ccaaataatt cacaaagttg tggcagaatt
 2160
 gtgagagtga agtgcaattc tgtggactgt caaatgccaa acatggaagc caatgtgcct
 2220
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 2280
 atgcagcatt caattcagaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa
 2329

<210> 2114

<211> 758

<212> PRT

<213> Homo sapiens

<400> 2114

Xaa Tyr Lys Lys Leu Phe Met Phe Glu Arg Val His His Gly Glu Glu
 1 5 10 15
 Leu His Met Pro Ile Thr Val Ile Trp Gly Val Ser Pro Glu Asp Asn
 20 25 30
 Gly Asn Pro Leu Asn Pro Lys Ser Lys Gly Lys Leu Thr Leu Asp Ser
 35 40 45
 Ser Phe Asn Ile Ala Ser Pro Ala Ser Gln Ala Trp Ile Leu His Phe
 50 55 60
 Cys Gln Lys Leu Arg Asn Gln Thr Phe Phe Tyr Gln Thr Asp Glu Gln
 65 70 75 80
 Asp Phe Thr Ser Cys Phe Ile Glu Thr Phe Lys Gln Trp Met Glu Asn
 85 90 95
 Gln Asp Cys Asp Glu Pro Ala Leu Tyr Pro Cys Cys Ser His Trp Ser
 100 105 110
 Phe Pro Tyr Lys Gln Glu Ile Phe Glu Leu Cys Ile Lys Arg Ala Ile
 115 120 125
 Met Glu Leu Glu Arg Ser Thr Gly Tyr His Leu Asp Ser Lys Thr Pro
 130 135 140
 Gly Pro Arg Phe Asp Ile Asn Asp Thr Ile Arg Ala Val Val Leu Glu
 145 150 155 160
 Phe Gln Ser Thr Tyr Leu Phe Thr Leu Ala Tyr Glu Lys Met His Gln
 165 170 175
 Phe Tyr Lys Glu Val Asp Ser Trp Ile Ser Ser Glu Leu Ser Ser Ala
 180 185 190
 Pro Glu Gly Leu Ser Asn Gly Trp Phe Val Ser Asn Leu Glu Phe Tyr
 195 200 205
 Asp Leu Gln Asp Ser Leu Ser Asp Gly Thr Leu Ile Ala Met Gly Leu
 210 215 220
 Ser Val Ala Val Ala Phe Ser Val Met Leu Leu Thr Thr Trp Asn Ile

225 230 235 240
 Ile Ile Ser Leu Tyr Ala Ile Ile Ser Ile Ala Gly Thr Ile Phe Val
 245 250 255
 Thr Val Gly Ser Leu Val Leu Leu Gly Trp Glu Leu Asn Val Leu Glu
 260 265 270
 Ser Val Thr Ile Ser Val Ala Val Gly Leu Ser Val Asp Phe Ala Val
 275 280 285
 His Tyr Gly Val Ala Tyr Arg Leu Ala Pro Asp Pro Asp Arg Glu Gly
 290 295 300
 Lys Val Ile Phe Ser Leu Ser Arg Val Gly Ser Ala Met Ala Met Ala
 305 310 315 320
 Ala Leu Thr Thr Phe Val Ala Gly Ala Met Met Ile Pro Ser Thr Val
 325 330 335
 Leu Ala Tyr Thr Gln Leu Gly Thr Phe Met Met Leu Ile Met Cys Ile
 340 345 350
 Ser Trp Ala Phe Ala Thr Phe Phe Gln Cys Met Cys Arg Cys Leu
 355 360 365
 Gly Pro Gln Gly Thr Cys Gly Gln Ile Pro Leu Pro Lys Lys Leu Gln
 370 375 380
 Cys Ser Ala Phe Ser His Ala Leu Ser Thr Ser Pro Ser Asp Lys Gly
 385 390 395 400
 Gln Ser Lys Thr His Thr Ile Asn Ala Tyr His Leu Asp Pro Arg Gly
 405 410 415
 Pro Lys Ser Glu Leu Glu His Glu Phe Tyr Glu Leu Glu Pro Leu Ala
 420 425 430
 Ser His Ser Cys Thr Ala Pro Glu Lys Thr Thr Tyr Glu Glu Thr His
 435 440 445
 Ile Cys Ser Glu Phe Phe Asn Ser Gln Ala Lys Asn Leu Gly Met Pro
 450 455 460
 Val His Ala Ala Tyr Asn Ser Glu Leu Ser Lys Ser Thr Glu Ser Asp
 465 470 475 480
 Thr Gly Ser Ala Leu Leu Gln Pro Pro Leu Glu Gln His Thr Val Cys
 485 490 495
 His Phe Phe Ser Leu Asn Gln Arg Cys Ser Cys Pro Asp Ala Tyr Lys
 500 505 510
 His Leu Asn Tyr Gly Pro His Ser Cys Gln Gln Met Gly Asp Cys Leu
 515 520 525
 Cys His Gln Cys Ser Pro Thr Thr Ser Ser Phe Val Gln Ile Gln Asn
 530 535 540
 Gly Val Ala Pro Leu Lys Ala Thr His Gln Ala Val Glu Gly Phe Val
 545 550 555 560
 His Pro Ile Thr His Ile His His Cys Pro Cys Leu Gln Gly Arg Val
 565 570 575
 Lys Pro Ala Gly Met Gln Asn Ser Leu Pro Arg Asn Phe Phe Leu His
 580 585 590
 Pro Val Gln His Ile Gln Ala Gln Glu Lys Ile Gly Lys Thr Asn Val
 595 600 605
 His Ser Leu Gln Arg Ser Ile Glu Glu His Leu Pro Lys Met Ala Glu
 610 615 620
 Pro Ser Ser Phe Val Cys Arg Ser Thr Gly Ser Leu Leu Lys Thr Cys
 625 630 635 640
 Cys Asp Pro Glu Asn Lys Gln Arg Glu Leu Cys Lys Asn Arg Asp Val
 645 650 655
 Ser Asn Leu Glu Ser Ser Gly Gly Thr Glu Asn Lys Ala Gly Gly Lys


```

        660                665                670
Val Glu Leu Ser Leu Ser Gln Thr Asp Ala Ser Val Asn Ser Glu His
        675                680                685
Phe Asn Gln Asn Glu Pro Lys Val Leu Phe Asn His Leu Met Gly Glu
        690                695                700
Ala Gly Cys Arg Ser Cys Pro Asn Asn Ser Gln Ser Cys Gly Arg Ile
705                710                715                720
Val Arg Val Lys Cys Asn Ser Val Asp Cys Gln Met Pro Asn Met Glu
        725                730                735
Ala Asn Val Pro Ala Val Leu Thr His Ser Glu Leu Ser Gly Glu Ser
        740                745                750
Leu Leu Ile Lys Thr Leu
        755

```

<210> 2115

<211> 461

<212> DNA

<213> Homo sapiens

<400> 2115

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acgcgtctct ggccctgggag cgggctcccc cgacacgcc ccttccctgc cagatgggtgc
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ttctgggtat tccagaatct ggaatggggg atgcctatcc ccctcctgag cccacctgct
120
ggctcttgggt ccttggagcc caccaagtcc acaaccacct gctctgaata gaaagctgac
180
attgaaccga acagccgcgt cggaggggga tatctgtgga gagctgtgac tgggagccgg
240
tgtgtgcctt tctgtgttca tttctcgagt cctctgccgg ctgctgccag gtgaaggcat
300
ctccatgccc agccgggtggg cagctggggc ggggtggac tccagcttctg cccgacgggg
360
ttcagatgac cgagatccta cgggattgcc aatgtgtggg gacggggggc tttcaggggc
420
gggaaaaacat gtcccatcc gtgggaagtg gagccacgtg g
461

```

<210> 2116

<211> 146

<212> PRT

<213> Homo sapiens

<400> 2116

```

Met Gly Thr Cys Phe Pro Ala Pro Glu Ser Pro Pro Ser Pro His Ile
1         5         10        15
Gly Asn Pro Val Gly Ser Arg Ser Ser Glu Pro Arg Arg Ala Glu Ala
        20        25        30
Gly Gly Pro Pro Ala Pro Ala Ala His Arg Leu Gly Met Glu Met Pro
        35        40        45
Ser Pro Gly Ser Ser Arg Gln Arg Thr Arg Glu Met Thr Thr Glu Arg
50        55        60
His Thr Pro Ala Pro Ser His Ser Ser Pro Gln Ile Ser Pro Ser Asp
65        70        75        80
Ala Ala Val Arg Phe Asn Val Ser Phe Leu Phe Arg Ala Gly Gly Cys

```

```

      85              90              95
Gly Leu Gly Gly Leu Gln Gly Pro Lys Thr Ser Arg Trp Ala Gln Glu
      100              105              110
Gly Asp Arg His Pro Pro Phe Gln Ile Leu Glu Tyr Pro Glu Ala Pro
      115              120              125
Ser Gly Arg Glu Gly Gly Val Ser Gly Glu Pro Ala Pro Arg Pro Glu
      130              135              140
Thr Arg
145

```

```

<210> 2117
<211> 360
<212> DNA
<213> Homo sapiens

```

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<400> 2117
nnacgcgcttg gggagacgac ggtgaccttc ccagcaagct catcgaggga tgaacaatc
60
cgcgccagcg ttaagacctt ctgcggggct gtcaccgccc atctggagaa gtgtggaccg
120
atcaggtgac actcgcggta gactgaatag atgcctgagt ctgaagacac tgtgtggctg
180
accctaagagg ccttcgataa gctcaccag gagctggagt acctcaaagg cgaaggccgc
240
accgctcattg ccaacaagat tgccgacgcc cgctcggaag gcgaccttcc tgagaacggc
300
ggctaccatg ccgcccgtag ggagcagggg caggccgagg cccgcacccg tcaactcgag
360

```

```

<210> 2118
<211> 70
<212> PRT
<213> Homo sapiens

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```

<400> 2118
Met Pro Glu Ser Glu Asp Thr Val Trp Leu Thr Gln Glu Ala Phe Asp
1      5      10      15
Lys Leu Thr Gln Glu Leu Glu Tyr Leu Lys Gly Glu Gly Arg Thr Val
20     25     30
Ile Ala Asn Lys Ile Ala Asp Ala Arg Ser Glu Gly Asp Leu Ser Glu
35     40     45
Asn Gly Gly Tyr His Ala Ala Arg Glu Glu Gln Gly Gln Ala Glu Ala
50     55     60
Arg Ile Arg Gln Leu Glu
65              70

```

```

<210> 2119
<211> 465
<212> DNA
<213> Homo sapiens

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```

<400> 2119
nacgcgtgaa gggcgctgt cgccctctca ctggcgagc ctgcactgcc gctgccgcct
60

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cgccccgcc ttgccttggc gttgtctctg gcactgtggc ggactgacca cggccccggc
 120
 atgggctgca agggagacgc gagcggagtt tgctataaaa tgggagttct ggttgctactc
 180
 actgtttctg ggctgttctc ctacgtaaag gccgactcaa aagccattac aacctctctt
 240
 acaacaaaat gggtttccac tccattgttg ttagaagcca gtgagttttt agcagaagac
 300
 agtcaagaga aattttggaa tttttagtaa gccagtcaaa atattggatc atcagatcat
 360
 gacgggtaccg attattccta ctatcatgca atattggagg ctgcatttca gtttctgtca
 420
 cccctccagc agaatttgtt taaattttgt ctgtcccttc acgcg
 465

<210> 2120

<211> 115

<212> PRT

<213> Homo sapiens

<400> 2120

Met	Gly	Cys	Lys	Gly	Asp	Ala	Ser	Gly	Val	Cys	Tyr	Lys	Met	Gly	Val
1				5				10					15		
Leu	Val	Val	Leu	Thr	Val	Leu	Trp	Leu	Phe	Ser	Ser	Val	Lys	Ala	Asp
		20					25					30			
Ser	Lys	Ala	Ile	Thr	Thr	Ser	Leu	Thr	Thr	Lys	Trp	Phe	Ser	Thr	Pro
		35				40					45				
Leu	Leu	Leu	Glu	Ala	Ser	Glu	Phe	Leu	Ala	Glu	Asp	Ser	Gln	Glu	Lys
	50				55					60					
Phe	Trp	Asn	Phe	Val	Glu	Ala	Ser	Gln	Asn	Ile	Gly	Ser	Ser	Asp	His
65				70					75					80	
Asp	Gly	Thr	Asp	Tyr	Ser	Tyr	Tyr	His	Ala	Ile	Leu	Glu	Ala	Ala	Phe
			85					90					95		
Gln	Phe	Leu	Ser	Pro	Leu	Gln	Gln	Asn	Leu	Phe	Lys	Phe	Cys	Leu	Ser
		100					105						110		
Leu	His	Ala													
			115												

<210> 2121

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2121

ccggacaagg tcaatggaat gaaaacctcc cgccgacag acaatagtat aaatgttaca
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 tgtggtcctc cttatgaaac taatggccct aaaacctttt acatttttgt agtcagaagt
 120
 ggaggttctt ttgttacaaa atacaacaag acaaaactgtc agttttatgt agataatctc
 180
 tactattcaa ctgactatga gtttctggtc tcttttcaca atggagtgtg cgaggagagt
 240
 tcagttataa gaaatgagtc aacaaatttt aatgctaaag ccctgattat attcctgggtg
 300

ttttctgatta ttgtgacatc aatagccttg cttgtt
336

<210> 2122
<211> 112
<212> PRT
<213> Homo sapiens

<400> 2122
Pro Asp Lys Val Asn Gly Met Lys Thr Ser Arg Pro Thr Asp Asn Ser
1 5 10 15
Ile Asn Val Thr Cys Gly Pro Pro Tyr Glu Thr Asn Gly Pro Lys Thr
20 25 30
Phe Tyr Ile Leu Val Val Arg Ser Gly Gly Ser Phe Val Thr Lys Tyr
35 40 45
Asn Lys Thr Asn Cys Gln Phe Tyr Val Asp Asn Leu Tyr Tyr Ser Thr
50 55 60
Asp Tyr Glu Phe Leu Val Ser Phe His Asn Gly Val Tyr Glu Gly Asp
65 70 75 80
Ser Val Ile Arg Asn Glu Ser Thr Asn Phe Asn Ala Lys Ala Leu Ile
85 90 95
Ile Phe Leu Val Phe Leu Ile Ile Val Thr Ser Ile Ala Leu Leu Val
100 105 110

<210> 2123
<211> 426
<212> DNA
<213> Homo sapiens

<400> 2123
aactgggccc agttcggcaa cctgcacccg ttcgccccgg ccgagcaaa g cgtggttat
60
cagcaactga ccgacgaact ggaagc gatg ctctgcgcgc ccacaggtta tgacgcgac
120
tccttcgcgc cgaacgctgg ctcccagggc gagtaacgcg gtctgctggc gatccgcgct
180
taccaccaga gccgtggcga tgagcgtcgc gacatctgcc tgattccgtc ctctgcccc
240
ggcaccacaac cggaaccgc caacatggcc ggcatgcgcg tggtcgtgac cgttgcgac
300
gcccgcggca acgtcgacat cgaagacctg cgcgccaagg ctatcgagca ccgcgaacac
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420
gagatc
426

<210> 2124
<211> 142
<212> PRT
<213> Homo sapiens

<400> 2124
Asn Trp Ala Glu Phe Gly Asn Leu His Pro Phe Ala Pro Ala Glu Gln

```

      1           5           10           15
Ser Ala Gly Tyr Gln Gln Leu Thr Asp Glu Leu Glu Ala Met Leu Cys
      20           25           30
Ala Ala Thr Gly Tyr Asp Ala Ile Ser Leu Gln Pro Asn Ala Gly Ser
      35           40           45
Gln Gly Glu Tyr Ala Gly Leu Leu Ala Ile Arg Ala Tyr His Gln Ser
      50           55           60
Arg Gly Asp Glu Arg Arg Asp Ile Cys Leu Ile Pro Ser Ser Ala His
      65           70           75           80
Gly Thr Asn Pro Ala Thr Ala Asn Met Ala Gly Met Arg Val Val Val
      85           90           95
Thr Ala Cys Asp Ala Arg Gly Asn Val Asp Ile Glu Asp Leu Arg Ala
      100          105          110
Lys Ala Ile Glu His Arg Glu His Leu Ala Ala Leu Met Ile Thr Tyr
      115          120          125
Pro Ser Thr His Gly Val Phe Glu Glu Gly Ile Arg Glu Ile
      130          135          140

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<210> 2125

<211> 285

<212> DNA

<213> Homo sapiens

<400> 2125

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ngtatggcat ctgctgcttc aagttttgtg gtgacaccaa atgtcacttc taacacaacc
60
acagtcaagc ccaatatggt tatgttacct attcaaaaca caagagggttc aagattggtt
120
ctaaaggcgg ctgaagacgc ggcaccaccg gctgtcaccg ttgaagcggc caaggaagag
180
aagccgaagc caccaccaat tggacctaa agaggagcca aggtgagaat tcttaggaag
240
gagtcatact ggttcaaagg agtgggatca gttgtgactg ttgat
285

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<210> 2126

<211> 95

<212> PRT

<213> Homo sapiens

<400> 2126

```

Xaa Met Ala Ser Ala Ala Ser Ser Phe Val Val Thr Pro Asn Val Thr
1           5           10           15
Ser Asn Thr Thr Thr Val Lys Pro Asn Met Val Met Leu Pro Ile Gln
      20           25           30
Asn Thr Arg Gly Ser Arg Leu Val Leu Lys Ala Ala Glu Asp Ala Ala
      35           40           45
Pro Pro Ala Val Thr Val Glu Ala Ala Lys Glu Glu Lys Pro Lys Pro
      50           55           60
Pro Pro Ile Gly Pro Lys Arg Gly Ala Lys Val Arg Ile Leu Arg Lys
      65           70           75           80
Glu Ser Tyr Trp Phe Lys Gly Val Gly Ser Val Val Thr Val Asp
      85           90           95

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<210> 2127
 <211> 454
 <212> DNA
 <213> Homo sapiens

<400> 2127
 atggcagcca agatgcttgc attgttcgct ctcctagctc tttgtgcaag cgccactagt
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 gcgacgcata ttccagggca cttgtcacca gtcatgccat tgggtaccat gaacccatgc
 120
 atgcagctact gcatgatgca acaggggctt gccagcttga tggcggtgcc gtccttgatg
 180
 ctgcagcaac tgttggcctt accgcttcag acgatgccag tgatgatgcc acagatgatg
 240
 acgcctaaca tgatgtcacc attgatgatg ccgagcatga tgtcaccaat ggtcttgccg
 300
 agcatgatgt cgcaaatgat gatgccacaa tgtcactgcg acgccgtctc gcagattatg
 360
 ctgcaacagc agttaccatt catgttcaac ccaatggcca tgacgattcc acccatgttc
 420
 ttacagcaac cctttgttgg tgctgcattc taga
 454

<210> 2128
 <211> 150
 <212> PRT
 <213> Homo sapiens

<400> 2128
 Met Ala Ala Lys Met Leu Ala Leu Phe Ala Leu Leu Ala Leu Cys Ala
 1 5 10 15
 Ser Ala Thr Ser Ala Thr His Ile Pro Gly His Leu Ser Pro Val Met
 20 25 30
 Pro Leu Gly Thr Met Asn Pro Cys Met Gln Tyr Cys Met Met Gln Gln
 35 40 45
 Gly Leu Ala Ser Leu Met Ala Cys Pro Ser Leu Met Leu Gln Gln Leu
 50 55 60
 Leu Ala Leu Pro Leu Gln Thr Met Pro Val Met Met Pro Gln Met Met
 65 70 75 80
 Thr Pro Asn Met Met Ser Pro Leu Met Met Pro Ser Met Met Ser Pro
 85 90 95
 Met Val Leu Pro Ser Met Met Ser Gln Met Met Met Pro Gln Cys His
 100 105 110
 Cys Asp Ala Val Ser Gln Ile Met Leu Gln Gln Gln Leu Pro Phe Met
 115 120 125
 Phe Asn Pro Met Ala Met Thr Ile Pro Pro Met Phe Leu Gln Gln Pro
 130 135 140
 Phe Val Gly Ala Ala Phe
 145 150

<210> 2129
 <211> 354
 <212> DNA
 <213> Homo sapiens

<400> 2129
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 60
 ctcacgcccc ttgacaagcg gcgtgatgcy aacggcggtg acgggggtgt gcgcacggg
 120
 actatcaagg ctctccactc caaatatggg atcgggtgaac tcatccgtgc cttcagtcgg
 180
 gtccatgatg aacggcctaa taccgtcctt cgtatctggg gcggcgggccc agacgagaat
 240
 cccctcaagg tcttggtcgc cgtcttctgc ccggacggtt cgggtggagt tcgcggtgccc
 300
 attgatcatt ctgaggtcag aaatgccttg ggtagtttgg acatctttgc cgcc
 354

<210> 2130
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 2130
 Thr Arg Asp Leu Val Asn Lys Pro Ile Ser Ile Thr Pro Phe Gly Val
 1 5 10 15
 Asp Thr Glu Ile Leu Thr Pro Phe Asp Lys Arg Arg Asp Ala Asn Gly
 20 25 30
 Gly Asp Gly Val Val Arg Ile Gly Thr Ile Lys Ala Leu His Ser Lys
 35 40 45
 Tyr Gly Ile Gly Glu Leu Ile Arg Ala Phe Ser Arg Val His Asp Glu
 50 55 60
 Arg Pro Asn Thr Val Leu Arg Ile Trp Gly Gly Gly Pro Asp Glu Asn
 65 70 75 80
 Pro Leu Lys Val Leu Ala Arg Arg Leu Val Pro Asp Gly Ser Val Glu
 85 90 95
 Phe Arg Gly Ala Ile Asp His Ser Glu Val Arg Asn Ala Leu Gly Ser
 100 105 110
 Leu Asp Ile Phe Ala Ala
 115

<210> 2131
 <211> 324
 <212> DNA
 <213> Homo sapiens

<400> 2131
 gcacgcggc cattggttat gtgtgcctat tccattggtt atgtggaagg ttgggatcag
 60
 ccagacagtc attatgatgg ttgtttacag ctgggcgagt ggggctttcg aatcaatgac
 120
 ctgatgaaga cggtagaggg cgcggcaggg tgcattgagt attatgaaat gctcaacgaa
 180
 caacgccccg acttgtctta tgacatagac ggtattgttt ataaagtga tcagattgac
 240
 ctgcaagaag agcttggttt tattgctcgt gcgccacgct gggcaattgc tcgaaaaattt
 300

cctgctcaag aagaagttac gcgt
324

<210> 2132
<211> 108
<212> PRT
<213> Homo sapiens

<400> 2132
Ala Ser Arg Pro Leu Val Met Cys Ala Tyr Ser Ile Gly Tyr Val Glu
1 5 10 15
Gly Trp Asp Gln Pro Asp Ser His Tyr Asp Gly Leu Leu Gln Leu Gly
20 25 30
Glu Trp Gly Phe Arg Ile Asn Asp Leu Met Lys Thr Val Glu Gly Ala
35 40 45
Ala Gly Cys Ile Glu Tyr Tyr Glu Met Leu Asn Glu Gln Arg Pro Asp
50 55 60
Leu Ser Tyr Asp Ile Asp Gly Ile Val Tyr Lys Val Asp Gln Ile Asp
65 70 75 80
Leu Gln Glu Glu Leu Gly Phe Ile Ala Arg Ala Pro Arg Trp Ala Ile
85 90 95
Ala Arg Lys Phe Pro Ala Gln Glu Glu Val Thr Arg
100 105

<210> 2133
<211> 292
<212> DNA
<213> Homo sapiens

<400> 2133
ggtaacctgca atatggtatt gcatgacatg aataaatttt tccttactct gaactcacta
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gtggctgtct ttagaggacc cggcgaactt ttcctgcttt ttcccacttg ctccatcaca
120
tatacatcat caccaacacc catcacatac atacacagtc atgaacggcc atcaggccac
180
accagattac atcgctgtgg atccaaccct gcatttttct gccctctctt tactgcgagt
240
gtcacctcta cccggaaagg ttttcaacct ccaagtttcc cagtaattta tt
292

<210> 2134
<211> 93
<212> PRT
<213> Homo sapiens

<400> 2134
Met Val Leu His Asp Met Asn Lys Phe Phe Leu Thr Leu Asn Ser Leu
1 5 10 15
Val Ala Val Phe Arg Gly Pro Gly Glu Leu Phe Leu Leu Phe Pro Thr
20 25 30
Cys Ser Ile Thr Tyr Ile Thr Ser Pro Thr Pro Ile Thr Tyr Ile His
35 40 45
Ser His Glu Arg Pro Ser Gly His Thr Arg Leu His Arg Cys Gly Ser

50	55	60
Asn Pro Ala Phe Ser Cys Pro Ser Phe Thr Ala Ser Val Thr Ser Thr		
65	70	75
Arg Lys Gly Leu Gln Pro Pro Ser Phe Pro Val Ile Tyr		80
85	90	

<210> 2135

<211> 439

<212> DNA

<213> Homo sapiens

<400> 2135

acgcggtcca ttggtgtgtc gaatttcaag accgagcacc tggacgccat cgaggggggcc
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actccgagcg tcgaccaaact cgagatgcat ccctcgttca accaggcgac cttccgcgca
120
gagctggcgg agcgcggcat taaccggag gcctggagcc cgctgggcca gtcgaaggac
180
ctcgacaatc ccgtcctcac cgatatattcc aaggcgactg gaaagacgcc tgcccagggtg
240
gtcattcgct ggcacctgca gatcggcaac gtggtattcc ccaagtcggt gacaccatca
300
cgaattgcgg agaactttga tgtgttcgat ttcgagctgt ctgacgagca gatcgcggca
360
attgatggcc tggatcacgg caacaggctc ggtggtgacc cttctaccgc cgacttctga
420
ttctgcaaca ataaccggt
439

<210> 2136

<211> 139

<212> PRT

<213> Homo sapiens

<400> 2136

Thr Arg Ser Ile Gly Val Ser Asn Phe Lys Thr Glu His Leu Asp Ala		
1	5	10
Ile Glu Gly Ala Thr Pro Ser Val Asp Gln Ile Glu Met His Pro Ser		15
20	25	30
Phe Asn Gln Ala Thr Phe Arg Ala Glu Leu Ala Glu Arg Gly Ile Asn		35
40	45	50
Pro Glu Ala Trp Ser Pro Leu Gly Gln Ser Lys Asp Leu Asp Asn Pro		55
60	65	70
Val Leu Thr Asp Ile Ser Lys Ala Thr Gly Lys Thr Pro Ala Gln Val		75
80	85	90
Val Ile Arg Trp His Leu Gln Ile Gly Asn Val Val Phe Pro Lys Ser		95
100	105	110
Val Thr Pro Ser Arg Ile Ala Glu Asn Phe Asp Val Phe Asp Phe Glu		115
120	125	130
Leu Ser Asp Glu Gln Ile Ala Ala Ile Asp Gly Leu Asp His Gly Asn		135
Arg Leu Gly Gly Asp Pro Ser Thr Ala Asp Phe		

<210> 2137
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 2137
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 tccgggacag agatggctgg cggagcctgg ggccgcctgg cctgttactt ggagttcctg
 120
 aagaaggagg agctgaagga gttccagctt ctgctcgcca ataaagcgca ctccaggagc
 180
 tcttcgggtg agacacccgc tcagccagag aagacgagtg gcatggagggt ggcctcgtag
 240
 ctgggtggctc agtatgggga gcagcgggccc tgggacctag cctccatac ctgggagcag
 300
 atgggggtga ggctactgtg cgccaagcc
 330

<210> 2138
 <211> 86
 <212> PRT
 <213> Homo sapiens

<400> 2138
 Met Ala Gly Gly Ala Trp Gly Arg Leu Ala Cys Tyr Leu Glu Phe Leu
 1 5 10 15
 Lys Lys Glu Glu Leu Lys Glu Phe Gln Leu Leu Leu Ala Asn Lys Ala
 20 25 30
 His Ser Arg Ser Ser Ser Gly Glu Thr Pro Ala Gln Pro Glu Lys Thr
 35 40 45
 Ser Gly Met Glu Val Ala Ser Tyr Leu Val Ala Gln Tyr Gly Glu Gln
 50 55 60
 Arg Ala Trp Asp Leu Ala Leu His Thr Trp Glu Gln Met Gly Leu Arg
 65 70 75 80
 Ser Leu Cys Ala Gln Ala
 85

<210> 2139
 <211> 433
 <212> DNA
 <213> Homo sapiens

<400> 2139
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 gtgaacaagc tggcgagtag catcgccag tacaacgata agatttccaa agtcaccacc
 120
 gccgcccgtg ccccgaaaga cctgctggac cagcgcagcg aggcgggtgc ccagttgtcc
 180
 gagctggtgc ggaccaggt ggtccagcgc ggttcgagtt atgacgtcta tateggcagc
 240
 ggtcagcgcc tgggtatggg caacagcacc aacacctgt ccgcagtgcc gagcaaggac
 300

gacccgagcc agtcggcctt gcagctggat cgcgccacca gcaccgtcga tatcacctcc
 360
 acggtgaccc gtggcgagat cggtggtctg ctgcgctatc gcagcgatgt gctcgacccg
 420
 tcgatcaacg cgt
 433

<210> 2140

<211> 144

<212> PRT

<213> Homo sapiens

<400> 2140

Glu	Gln	Leu	Ser	Ala	Gln	Asn	Thr	Gly	Ile	Asn	Ser	Asn	Leu	Ser	Asp
1				5					10				15		
Met	Ala	Gly	Gln	Val	Asn	Lys	Leu	Ala	Ser	Thr	Ile	Ala	Gln	Tyr	Asn
			20					25					30		
Asp	Gln	Ile	Ser	Lys	Val	Thr	Thr	Ala	Ala	Gly	Ala	Pro	Asn	Asp	Leu
		35					40				45				
Leu	Asp	Gln	Arg	Ser	Glu	Ala	Val	Arg	Gln	Leu	Ser	Glu	Leu	Val	Gly
	50					55				60					
Thr	Gln	Val	Val	Gln	Arg	Gly	Ser	Ser	Tyr	Asp	Val	Tyr	Ile	Gly	Ser
65					70					75				80	
Gly	Gln	Arg	Leu	Val	Met	Gly	Asn	Ser	Thr	Asn	Thr	Leu	Ser	Ala	Val
			85						90					95	
Pro	Ser	Lys	Asp	Asp	Pro	Ser	Gln	Ser	Ala	Leu	Gln	Leu	Asp	Arg	Gly
			100					105					110		
Thr	Ser	Thr	Val	Asp	Ile	Thr	Ser	Thr	Val	Thr	Gly	Gly	Glu	Ile	Gly
		115				120					125				
Gly	Leu	Leu	Arg	Tyr	Arg	Ser	Asp	Val	Leu	Asp	Pro	Ser	Ile	Asn	Ala
	130					135					140				

<210> 2141

<211> 426

<212> DNA

<213> Homo sapiens

<400> 2141

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 60
 gtttatccct atctttcttt ccgcttgatc aatgatattg tggataaagg cgaagtgtta
 120
 ggtgacccaa ttgcttgta tgttaaatat cgtaaaggta ttaacaaagg cttgatgaaa
 180
 atcctgtcta aaatgggtat ttcaacgatt gcctcttata gtggtcgcga attgtttgaa
 240
 gcggttggtc tggatactaa agtggctgac ctttgtttca aaggcggtgc aagtcgtatc
 300
 aaagggtgctc gttttgaaga tttccagcgt gatcaagcaa cgattgccaa taatgcttgg
 360
 aagttacgta aacctattca acagggcggt tatcttaaat acgtacatga ctctgagtat
 420
 cagcg
 426

<210> 2142
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 2142
 Xaa Tyr Pro Cys Ser Asp Pro His Gln Phe Ala Val Leu Leu Gly Phe
 1 5 10 15
 Gly Ala Thr Ala Val Tyr Pro Tyr Leu Ser Phe Arg Leu Ile Asn Asp
 20 25 30
 Met Val Asp Lys Gly Glu Val Leu Gly Asp Pro Ile Ala Cys His Val
 35 40 45
 Lys Tyr Arg Lys Gly Ile Asn Lys Gly Leu Met Lys Ile Leu Ser Lys
 50 55 60
 Met Gly Ile Ser Thr Ile Ala Ser Tyr Arg Gly Ala Gln Leu Phe Glu
 65 70 75 80
 Ala Val Gly Leu Asp Thr Lys Val Val Asp Leu Cys Phe Lys Gly Val
 85 90 95
 Ala Ser Arg Ile Lys Gly Ala Arg Phe Glu Asp Phe Gln Arg Asp Gln
 100 105 110
 Ala Thr Ile Ala Asn Asn Ala Trp Lys Leu Arg Lys Pro Ile Gln Gln
 115 120 125
 Gly Gly Tyr Leu Lys Tyr Val His Asp Ser Glu Tyr His Ala
 130 135 140

<210> 2143
 <211> 1008
 <212> DNA
 <213> Homo sapiens

<400> 2143
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 60
 tgtcatattg tacgcagtat gtcttttcaa cgattcttgg cgggggtggc agccatcttg
 120
 cttctcctgc ctactgcgtg cgctgatgat gcgcaggcgc ccgttgcga taacctcggg
 180
 acggtctctca gcccctccaa ctccctcatt cgcgagccgg cgaattcgtc agtcaacggg
 240
 acgctcaaga gcacatatga gtacctccgg ctcatcgacg gtcacgatct acccgacgac
 300
 gatggctacg ctcatgatca tctggtcgcg gctttgcgcc cgtatttggg gaatgggtga
 360
 gacagtcggc agggccacgt caccacaact atggcgcgct catccctgaa aacctcgaac
 420
 gcgtttgtccg acaaggagag atcagagggtc gacaaacgta cccgcctgcc gaagggtgc
 480
 atcacgagaa agacggtgat gacggatctg cccatcgaga cgatgaggcg ggagatcggc
 540
 ctgtccaacg acgggttctg cctcacaccg tggaagggtc agacgacttc ttccgaggag
 600
 gctcgggtgg cgatgcaggc gctggccagt gccgacctat tcagcaatgc taaggacgcc
 660

gagaaatggg ggtgggagtc gatctcggac gggatattgc gccatctcga gacctacagt
 720
 ggccccagta cgactatcgc gatggccttg tcggcggcga ataccgtctc tacattgtct
 780
 cgttcccagt tgcaacgcat cggcgacagt ctgcgggatg cgccatatcc gaggaaggac
 840
 cttggtccgg cgctcattcg caatggaaag ccggtcaagg acaagtgcag tatcgaatcg
 900
 gcgtacctgt tgaggatttc cgggaattgg gcgtggtgac atgacggttt cttggcaagg
 960
 tgtgaccaag acattcccct cgggcgattc cgcgcgtggg ggggtgcac
 1008

<210> 2144

<211> 307

<212> PRT

<213> Homo sapiens

<400> 2144

Met	Phe	Thr	Gly	Asp	Ala	Val	Val	Ile	Val	Glu	Val	Ser	Gln	Leu	Cys
1				5					10					15	
His	Ile	Val	Arg	Ser	Met	Ser	Phe	Gln	Arg	Phe	Leu	Ala	Gly	Val	Ala
			20					25					30		
Ala	Ile	Leu	Leu	Leu	Pro	Thr	Ala	Cys	Ala	Asp	Asp	Ala	Gln	Ala	
		35				40					45				
Pro	Val	Val	Asp	Asn	Leu	Gly	Thr	Val	Leu	Ser	Pro	Ser	Asn	Ser	Leu
		50				55					60				
Ile	Arg	Glu	Pro	Ala	Asn	Ser	Ser	Val	Asn	Gly	Thr	Leu	Lys	Ser	Thr
65					70					75				80	
Tyr	Glu	Tyr	Leu	Arg	Leu	Ile	Asp	Gly	His	Asp	Leu	Pro	Asp	Asp	Asp
				85					90					95	
Gly	Tyr	Ala	His	Asp	His	Leu	Val	Ala	Ala	Leu	Arg	Pro	Tyr	Leu	Val
			100					105					110		
Asn	Gly	Gly	Asp	Ser	Arg	Gln	Ala	His	Val	Thr	Gln	Leu	Met	Ala	Ala
			115				120					125			
Ser	Ser	Leu	Lys	Thr	Leu	Asn	Ala	Leu	Ser	Asp	Lys	Glu	Arg	Ser	Glu
		130				135					140				
Val	Asp	Lys	Arg	Thr	Arg	Leu	Pro	Lys	Gly	Cys	Ile	Thr	Arg	Lys	Thr
145					150					155				160	
Val	Met	Thr	Asp	Leu	Pro	Ile	Ala	Thr	Met	Arg	Arg	Glu	Ile	Gly	Leu
				165					170					175	
Ser	Asn	Asp	Gly	Leu	Cys	Leu	Thr	Pro	Trp	Lys	Val	Lys	Thr	Thr	Ser
			180					185					190		
Ser	Glu	Glu	Ala	Arg	Trp	Ala	Met	Gln	Ala	Leu	Ala	Ser	Ala	Asp	Leu
		195					200					205			
Phe	Ser	Asn	Ala	Lys	Asp	Ala	Glu	Lys	Trp	Gly	Trp	Glu	Ser	Ile	Ser
		210				215					220				
Asp	Gly	Tyr	Leu	Arg	His	Leu	Glu	Thr	Tyr	Ser	Gly	Pro	Ser	Thr	Thr
225					230					235				240	
Ile	Ala	Met	Ala	Leu	Ser	Ala	Ala	Asn	Thr	Val	Ser	Thr	Leu	Ser	Arg
			245						250					255	
Ser	Gln	Leu	Gln	Arg	Ile	Gly	Asp	Ser	Leu	Ala	Asp	Ala	Pro	Tyr	Pro
		260					265						270		
Arg	Lys	Asp	Leu	Gly	Pro	Ala	Leu	Ile	Arg	Asn	Gly	Lys	Pro	Val	Lys

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                275                280                285
Asp Lys Cys Ser Ile Glu Ser Ala Tyr Leu Leu Arg Tyr Ser Gly Asn
   290                295                300
Trp Ala Trp
305

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<210> 2145
<211> 389
<212> DNA
<213> Homo sapiens

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<400> 2145
tctagaatcg tgtataacat tctacacaat aagctaagcc tactcttgta gaggcgatc
60
atgacaaccc ttgaacaatc attatctcaa attcccgcat ttctgattat tcatgaacat
120
ttattttagct cggcccagcc ttctgctgaa caactaaaaa tgattaaaga gtttggttgt
180
agcacagtca ttaaccttgc tttaactaat gcttcaaatc atcttgagaa tgaagaccgt
240
atttggttag accttggttt aaattatatt catattccaa ttgattggga gatgccttct
300
gctgagcagt gcttattagt tttagatttg attgatcatt tagtgcaaaa tgaaattgtt
360
tggatacatt gcgcaaaaaa taaacgcgt
389

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<210> 2146
<211> 109
<212> PRT
<213> Homo sapiens

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<400> 2146
Met Thr Thr Leu Glu Gln Ser Leu Ser Gln Ile Pro Ala Phe Ser Ile
 1          5          10          15
Ile His Glu His Leu Phe Ser Ser Ala Gln Pro Ser Ala Glu Gln Leu
20         25         30
Lys Leu Ile Lys Glu Phe Gly Cys Ser Thr Val Ile Asn Leu Ala Leu
35         40         45
Thr Asn Ala Ser Asn His Leu Glu Asn Glu Asp Arg Ile Cys Leu Asp
50         55         60
Leu Gly Leu Asn Tyr Ile His Ile Pro Ile Asp Trp Glu Met Pro Ser
65         70         75         80
Ala Glu Gln Cys Leu Leu Val Leu Asp Leu Ile Asp His Leu Val Gln
85         90         95
Asn Glu Ile Val Trp Ile His Cys Ala Lys Asn Lys Arg
100        105

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<210> 2147
<211> 235
<212> DNA
<213> Homo sapiens

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<400> 2147

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ctccctgctg gctgcgtctc cgaggacatg tgcagtcctg acccctgttt caatgggtggg
 60
 acttgccctg tcacctggaa tgacttccac tgtacctgcc ctgccaattt cacggggcct
 120
 acatgtgccc agcagctgtg gtgtcccgcc cagccctgtc tccacacctgc cacgtgtgtg
 180
 gcggaggcca cgttccgcga ggggtccccc gccgcgttca gcgggcacaa cgcgt
 235

<210> 2148

<211> 78

<212> PRT

<213> Homo sapiens

<400> 2148

Leu	Pro	Ala	Gly	Cys	Val	Ser	Glu	Asp	Met	Cys	Ser	Pro	Asp	Pro	Cys
1			5						10					15	
Phe	Asn	Gly	Gly	Thr	Cys	Leu	Val	Thr	Trp	Asn	Asp	Phe	His	Cys	Thr
			20					25					30		
Cys	Pro	Ala	Asn	Phe	Thr	Gly	Pro	Thr	Cys	Ala	Gln	Gln	Leu	Trp	Cys
		35					40					45			
Pro	Gly	Gln	Pro	Cys	Leu	Pro	Pro	Ala	Thr	Cys	Val	Ala	Glu	Ala	Thr
		50				55					60				
Phe	Arg	Glu	Gly	Pro	Pro	Ala	Ala	Phe	Ser	Gly	His	Asn	Ala		
65					70						75				

<210> 2149

<211> 1474

<212> DNA

<213> Homo sapiens

<400> 2149

ntactgccac cattggaact tttgatgttg atggggaaga gttgcaacac ctccagggtt
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 gtctctgtga tgggtggctgc gaatgatttg ccttgacaat agctgaaaaa ccaccatctg
 120
 caacacgtgg gagtaagact tctcctgtct tttgccagtg gtctgagggtg atgaaccacc
 180
 ctggcttggt gtgctgtgtc cagcaaaacta caggggtgcc gctggtagtt atgggtgaaa
 240
 cagacacttt tcttatccac gagattaaga ctcttctctgc taaagcgaag atccaagaca
 300
 tggttgtctat taggcacacg gcctgcaatg agcagcagcg gacaacaatg attctgctgt
 360
 gtgaggatgg cagcctgcgc atttcatatg ccaacgtgga gaacacctcc tactggctgc
 420
 agccatccct gcagcccagc agtgtcatca gcatcatgaa gcctgttcga aagcgcaaaa
 480
 cagctacaat cacaaccng cagctctagc caggtgactt tcccattga cttttttgaa
 540
 cacaaccagc agctgacaga tgtggagttt ggtggtaacg acctcttaca ggtctataat
 600
 gcacaacaga taaaacaccg gctgaattcc actggcatgt atgtggccaa caccaagccc
 660

ggaggcttca ccattgagat tagtaacaac aatagcacta tggatgatgac aggcagtcgg
 720
 atccagattg ggactcaagc aatagaacgg gccccgtcat atatcgagat ctctggcaga
 780
 actatgcagc tcaacctgag tcgctcagc tggtttgact tcccccttac cagagaagaa
 840
 gccctgcagg ctgataagaa gctgaacctc ttcattgggg cctcggtgga tccagcaggt
 900
 gtcacataga tagatgctgt aaaaatttat ggcaagacta aggagcagtt tggctggcct
 960
 gatgagcccc cagaagaatt cccttctgcc tctgtcagca acatctgccc ttcaaatctg
 1020
 aaccagagca acggcactgg agatagcgac tcagctgccc ccactacgac cagtggaaact
 1080
 gtcttgagga ggctggttgt gagttcttta gaagccctgg aaagctgctt tgcggtggc
 1140
 ccaatcatcg agaaggagag aaacaagaat gctgctcagg agctggccac ttgtctgtg
 1200
 tccttgccag cacctgccag tgtccagcag cagtccaaga gccttctggc cagcctgcac
 1260
 accagccgtc cggcctacca cagccacaag gtaactgttc tctcagggaa aggaaattgc
 1320
 agtgctgaca gggaatcaaa taagttagct ctctattgta aagcaacagc acagcaaatg
 1380
 aaggtagagg gaggatagca ttcagattag acctacattt tacagagttt ctctgagaa
 1440
 attctcaagt gccactcaaa actgagggta agcc
 1474

<210> 2150

<211> 312

<212> PRT

<213> Homo sapiens

<400> 2150

Ser	Leu	Phe	Glu	Ser	Ala	Lys	Gln	Leu	Gln	Ser	Gln	Pro	Xaa	Thr	Ser
1				5				10						15	
Ser	Gln	Val	Thr	Phe	Pro	Ile	Asp	Phe	Phe	Glu	His	Asn	Gln	Gln	Leu
		20						25					30		
Thr	Asp	Val	Glu	Phe	Gly	Gly	Asn	Asp	Leu	Leu	Gln	Val	Tyr	Asn	Ala
		35					40					45			
Gln	Gln	Ile	Lys	His	Arg	Leu	Asn	Ser	Thr	Gly	Met	Tyr	Val	Ala	Asn
		50				55				60					
Thr	Lys	Pro	Gly	Gly	Phe	Thr	Ile	Glu	Ile	Ser	Asn	Asn	Asn	Ser	Thr
65				70						75				80	
Met	Val	Met	Thr	Gly	Met	Arg	Ile	Gln	Ile	Gly	Thr	Gln	Ala	Ile	Glu
				85				90					95		
Arg	Ala	Pro	Ser	Tyr	Ile	Glu	Ile	Phe	Gly	Arg	Thr	Met	Gln	Leu	Asn
		100						105				110			
Leu	Ser	Arg	Ser	Arg	Trp	Phe	Asp	Phe	Pro	Phe	Thr	Arg	Glu	Glu	Ala
		115				120					125				
Leu	Gln	Ala	Asp	Lys	Lys	Leu	Asn	Leu	Phe	Ile	Gly	Ala	Ser	Val	Asp
		130				135					140				
Pro	Ala	Gly	Val	Thr	Met	Ile	Asp	Ala	Val	Lys	Ile	Tyr	Gly	Lys	Thr


```

145              150              155              160
Lys Glu Gln Phe Gly Trp Pro Asp Glu Pro Glu Glu Phe Pro Ser
              165              170              175
Ala Ser Val Ser Asn Ile Cys Pro Ser Asn Leu Asn Gln Ser Asn Gly
              180              185              190
Thr Gly Asp Ser Asp Ser Ala Ala Pro Thr Thr Thr Ser Gly Thr Val
              195              200              205
Leu Glu Arg Leu Val Val Ser Ser Leu Glu Ala Leu Glu Ser Cys Phe
              210              215              220
Ala Val Gly Pro Ile Ile Glu Lys Glu Arg Asn Lys Asn Ala Ala Gln
              225              230              235
Glu Leu Ala Thr Leu Leu Leu Ser Leu Pro Ala Pro Ala Ser Val Gln
              245              250              255
Gln Gln Ser Lys Ser Leu Leu Ala Ser Leu His Thr Ser Arg Ser Ala
              260              265              270
Tyr His Ser His Lys Val Thr Val Leu Ser Gly Lys Gly Asn Cys Ser
              275              280              285
Ala Asp Arg Glu Ser Asn Lys Leu Ala Leu His Cys Lys Ala Thr Ala
              290              295              300
Gln Gln Ser Lys Val Glu Gly Gly
305              310

```

```

<210> 2151
<211> 511
<212> DNA
<213> Homo sapiens

```

```

<400> 2151
gccggcggttt acctgtgggg ccggtcggg cgcggaaga cctggctgat ggatcaattc
60
caccaagacc tgnncgggtg ccggcgcnng cggcagcact ttcacatctt catgggctgg
120
gtgcatcagc gctcctttca gttgaccggg atcgccgacg cattgcgggc gctggctcgt
180
gagctggcgg ccgaggtgcg ggtgctgtgt ttcgatgagc tggctgctca tgacatcggt
240
gacgcgatca ttctcgggcg cctgtttcag gtgatgttcg acgcaggcgt ggtgggtggc
300
tgcacctcca atctgccgcc ggatecagctg tatgccgacg gcttcaaccg cgaccgcttc
360
ctgccggcga tcaccgcgat caaacagcac atgcaagtgg tcgcggtgaa tggcgcgga
420
gatcatcgct tgcattccgg cgccatcgag cagcgttact gggcgctct gccgggagcag
480
ggtagcgcgt tgagccaggt gttcgacgcg t
511

```

```

<210> 2152
<211> 170
<212> PRT
<213> Homo sapiens

```

```

<400> 2152
Ala Gly Val Tyr Leu Trp Gly Pro Val Gly Arg Gly Lys Thr Trp Leu

```

```

      1           5           10           15
Met Asp Gln Phe His Gln Ser Leu Xaa Gly Cys Arg Arg Xaa Arg Gln
      20           25           30
His Phe His His Phe Met Gly Trp Val His Gln Arg Ser Phe Gln Leu
      35           40           45
Thr Gly Ile Ala Asp Pro Leu Arg Ala Leu Ala Arg Glu Leu Ala Ala
      50           55           60
Glu Val Arg Val Leu Cys Phe Asp Glu Leu Phe Val Asn Asp Ile Gly
      65           70           75           80
Asp Ala Ile Ile Leu Gly Arg Leu Phe Gln Val Met Phe Asp Ala Gly
      85           90           95
Val Val Val Val Cys Thr Ser Asn Leu Pro Pro Asp Gln Leu Tyr Ala
      100          105          110
Asp Gly Phe Asn Arg Asp Arg Phe Leu Pro Ala Ile Thr Ala Ile Lys
      115          120          125
Gln His Met Gln Val Val Ala Val Asn Gly Ala Glu Asp His Arg Leu
      130          135          140
His Pro Gly Ala Ile Glu Gln Arg Tyr Trp Val Ala Leu Pro Glu Gln
      145          150          155          160
Gly Ser Ala Leu Ser Gln Val Phe Asp Ala
      165          170

```

<210> 2153

<211> 528

<212> DNA

<213> Homo sapiens

<400> 2153

```

nnaccgggtgc caaagagctg gggatcaacc tgccgaacac cgccggtacg cagcaggtgt
60
tcagtcacgtg cagcgcgatt ggcggcgcca attgggacca ctcccgctg atcaagggcc
120
tgagcatat ggccaacttt tcgattcgcg atcaataagc cacaccgctc ccacctttga
180
tggcattcca agtctgaaat tgatccatct ctaataacaa aaatccccgg gagcccgtt
240
atgtcggtcg atccgcaaca cctgcttcgc gagctgtttg ccacagccat cgatgccgcc
300
caccgccggc atgtccttga accttatctg cccgctgacc gcacaggccg tgtgattgtg
360
attgggcccc gcaaaaccgc acccgccatg gcctcgtcg tcgagaacgg ctggcaaggc
420
gaagtcacgg gcttggtggt caccgcgtac ggccacggcg cgccgtgcaa aaaaatcgaa
480
gtggtcgagg ccgctcacc ggtgcgggat gccgcgggcc tggcggtg
528

```

<210> 2154

<211> 96

<212> PRT

<213> Homo sapiens

<400> 2154

```

Met Ser Val Asp Pro Gln His Leu Leu Arg Glu Leu Phe Ala Thr Ala

```

```

      1           5           10           15
Ile Asp Ala Ala His Pro Arg His Val Leu Glu Pro Tyr Leu Pro Ala
      20           25           30
Asp Arg Thr Gly Arg Val Ile Val Ile Gly Pro Gly Lys Thr Ala Pro
      35           40           45
Ala Met Ala Leu Val Val Glu Asn Gly Trp Gln Gly Glu Val Thr Gly
      50           55           60
Leu Val Val Thr Arg Tyr Gly His Gly Ala Pro Cys Lys Lys Ile Glu
      65           70           75           80
Val Val Glu Ala Ala His Pro Val Pro Asp Ala Ala Gly Leu Ala Val
      85           90           95

```

<210> 2155

<211> 297

<212> DNA

<213> Homo sapiens

<400> 2155

```

gtgcacgcgc acggcacacc cgccatgccg cgccgctatt tcgaggccct gctgcaggag
60
ttcgcccccg actgcgaggt gctcaccgtc accgattcag agggcaaccc cctcagttcg
120
gtgctcagtt tctacttcg tgatgaagt ctgccctact atcggggcga cgccgtcgcg
180
gcgcgcgaac tggcggccaa tgacttcaaa tactgggagc tgatgcgacg cgcctgtgcg
240
cgcgccctca agtggtttga ctacggccgc agcaagcagg gcacgggctc ctacgcn
297

```

<210> 2156

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2156

```

Met Pro Arg Arg Tyr Phe Glu Ala Leu Leu Gln Glu Phe Gly Pro Asp
      1           5           10           15
Cys Glu Val Leu Thr Val Thr Asp Ser Glu Gly Asn Pro Leu Ser Ser
      20           25           30
Val Leu Ser Phe Tyr Phe Arg Asp Glu Val Leu Pro Tyr Tyr Ala Gly
      35           40           45
Asp Ala Val Ala Ala Arg Glu Leu Ala Ala Asn Asp Phe Lys Tyr Trp
      50           55           60
Glu Leu Met Arg Arg Ala Cys Ala Arg Gly Leu Lys Val Phe Asp Tyr
      65           70           75           80
Gly Arg Ser Lys Gln Gly Thr Gly Ser Tyr Ala
      85           90

```

<210> 2157

<211> 711

<212> DNA

<213> Homo sapiens

<400> 2157

naccgagata acgaggtcgt catcatctcc actgggtccc aaggtgagcc actttcggcc
 60
 ctagcaagga tcgccaaccg agagcaccga gacatcgagg tgggggaggg agataccgtt
 120
 ttgctggcat cctctctcat ccggggtaat gagaatgccg tctatcgagt gattaatggc
 180
 ctgacgaagc ttggcgccgc cgtggtacat aagggaacg ctttgggtcca cgtttccggc
 240
 catgcccagc cgggagagct gctgtacgag tataacatcg tgcggccacg cgctgtgatg
 300
 ccgattcatg gtgaggtgag tcattctgtc gctaattgcc atctggccaa agcaaccggt
 360
 gtcgatgaga acaacgtggt gcttgtcgag gacggcgggg ttattgacct tgttgacgga
 420
 gtaccgcgag ttgttggtcaa ggtcgatgcc tcgtacatcc ttgttgacgg atctgggggtg
 480
 ggggagctta ccgaggacac gctcactgat cgcggtatcc tcggtgagga gggattcttg
 540
 tcagtcgtca ccgtgggtcga caccgctcgc gcgtcagtgg tgtctcgccc ggcatccag
 600
 gcgcgtggtt ttgccgaggg cgactcggtc ttcgaggaga tcaccgacca gatcgtcacc
 660
 gagctagaga aggcgatggc cggtggtatg gacgataccc accggttgca a
 711

<210> 2158

<211> 237

<212> PRT

<213> Homo sapiens

<400> 2158

Xaa Arg Asp Asn Glu Val Val Ile Ile Ser Thr Gly Ser Gln Gly Glu
 1 5 10 15
 Pro Leu Ser Ala Leu Ala Arg Ile Ala Asn Arg Glu His Arg Asp Ile
 20 25 30
 Glu Val Gly Glu Gly Asp Thr Val Leu Leu Ala Ser Ser Leu Ile Pro
 35 40 45
 Gly Asn Glu Asn Ala Val Tyr Arg Val Ile Asn Gly Leu Thr Lys Leu
 50 55 60
 Gly Ala Ala Val Val His Lys Gly Asn Ala Leu Val His Val Ser Gly
 65 70 75 80
 His Ala Ala Ala Gly Glu Leu Leu Tyr Ala Tyr Asn Ile Val Arg Pro
 85 90 95
 Arg Ala Val Met Pro Ile His Gly Glu Val Arg His Leu Val Ala Asn
 100 105 110
 Ala Asp Leu Ala Lys Ala Thr Gly Val Asp Glu Asn Asn Val Val Leu
 115 120 125
 Val Glu Asp Gly Gly Val Ile Asp Leu Val Asp Gly Val Pro Arg Val
 130 135 140
 Val Gly Lys Val Asp Ala Ser Tyr Ile Leu Val Asp Gly Ser Gly Val
 145 150 155 160
 Gly Glu Leu Thr Glu Asp Thr Leu Thr Asp Arg Arg Ile Leu Gly Glu
 165 170 175
 Glu Gly Phe Leu Ser Val Val Thr Val Val Asp Thr Arg Ser Ala Ser

```

          180              185              190
Val Val Ser Arg Pro Ala Ile Gln Ala Arg Gly Phe Ala Glu Gly Asp
          195              200              205
Ser Val Phe Ala Glu Ile Thr Asp Gln Ile Val Thr Glu Leu Glu Lys
          210              215              220
Ala Met Ala Gly Gly Met Asp Asp Thr His Arg Leu Gln
          225              230              235

```

<210> 2159
 <211> 322
 <212> DNA
 <213> Homo sapiens

```

<400> 2159
tcgcgagcac actccagcct ctggagagac gacaacgcgt gaagggggcac cagcttgcgg
60
ggcagcagct ccagggggcgg cctgggaggg ctttgtgcag aagaagcctg ttctcttcta
120
cctgttttga aaagttgtct ctgcagatgg tgggtgagag ttcgctgcc gggccactgt
180
cttcctgcc ctgcggacac ttcttcccca ccttcctaaa gctgtgggag acctggagcc
240
gtggagcatc aatggctctt tgactcagga atcttaaaaa atcacaccct ggggctacca
300
tgggggcctt ctggttctcc tt
322

```

<210> 2160
 <211> 100
 <212> PRT
 <213> Homo sapiens

```

<400> 2160
Met Val Ala Pro Gly Cys Asp Phe Leu Arg Phe Leu Ser Gln Arg Ala
1          5          10          15
Ile Asp Ala Pro Arg Leu Gln Val Ser His Ser Phe Arg Lys Val Gly
          20          25          30
Lys Lys Cys Pro Gln Gly Arg Glu Asp Ser Gly Pro Gly Ser Glu Leu
          35          40          45
Ser Pro Thr Ile Cys Arg Asp Asn Phe Ser Lys Gln Val Glu Gly Asn
          50          55          60
Arg Leu Leu Leu His Lys Ala Leu Pro Gly Arg Pro Trp Ser Cys Cys
65          70          75          80
Pro Ala Ser Trp Cys Pro Phe Thr Arg Cys Arg Leu Ser Arg Gly Trp
          85          90          95
Ser Val Leu Ala
          100

```

<210> 2161
 <211> 1070
 <212> DNA
 <213> Homo sapiens

<400> 2161

tcttagggga aggggaaggct tatctgaaga gtagacctct ggttttgaat gagggagaca
 60
 gtgggggatat gaggggggga aacctcaaaa agaatatgta tccatcacta tgaagggta
 120
 ggctatacag gggaagcctc caaagggaaa tctggaaaaa tgttctgaga gggacattaa
 180
 ggatgtactc agaaattaag aaaacatatt aggacttgcc aaaagtgaga gaagcaactg
 240
 agggagactta tatgcaaaaa tcgcaaaaga ggagagaaca aaagatggag gttggatgct
 300
 aaatagggaa agagaacgcg tgaatgaggt agggggcaga acatgcactg cagaaaaaca
 360
 acagatatgg aagggcatta aagagggcta aatgggaata ttaggaaatg agagttggga
 420
 atttgtcaga gttgtgtatt aacaaggaga gggtaaggta agaaggtggc aaagtaagag
 480
 ccagggcata aggttttgct gtccaggaag ctttgttga aaaaagttag aagtaattggg
 540
 tttggtcagt atggtgagag gtgagagagg ctaaatggga tgggcataaa gggcaggcca
 600
 gtggcaagaa tcctatgaaa gtgtaggcag atctgagagc acagacaaat acagtggaga
 660
 atgtggcaca gggcagaggg cagtgggctg agcagcaggt gcccatgggg agggggagat
 720
 ccagaagaac ccattgagtc cctaagaatg acacacaggt gacagctgaa agaaggaggg
 780
 acacagaaga tatagcagca tgattctctg gggcaaaatg aggaagaaaag gaatggaaga
 840
 agaaaagtga gggttcctgc tgatgtgagg ggatgactgg aggaaggcca ggtattgact
 900
 ggggggtaaa ggaaccattc ttggatcaag gttatgatgg aataagaagg aagagagagc
 960
 tggctagctg agtaaggac catcgtataa aacagacaaa agttaagact agatggagtg
 1020
 gcaactaggc agatcagatg tatttttaaa aggggaaact gctaagatct
 1070

<210> 2162

<211> 145

<212> PRT

<213> Homo sapiens

<400> 2162

Met Val Leu Tyr Ser Ala Ser Gln Leu Ser Leu Pro Ser Tyr Ser Ile
 1 5 10 15
 Ile Thr Leu Ile Gln Glu Trp Phe Leu Tyr Pro Pro Val Asn Thr Cys
 20 25 30
 Leu Ser Ser Ser His Pro Leu Thr Ser Ala Gly Thr Leu His Phe Leu
 35 40 45
 Leu Pro Phe Leu Ser Ser Ser Phe Cys Pro Arg Glu Ser Cys Cys Tyr
 50 55 60
 Ile Phe Cys Val Pro Pro Ser Phe Ser Cys His Leu Cys Val Ile Leu
 65 70 75 80
 Arg Asp Ser Met Gly Ser Ser Gly Tyr Ser Pro Pro His Gly His Ser

```

      85              90              95
Leu Leu Ser Pro Leu Pro Ser Ala Leu Cys His Ile Leu His Cys Ile
      100              105              110
Cys Leu Cys Ser Gln Ile Cys Leu His Phe His Arg Ile Leu Ala Thr
      115              120              125
Gly Leu Pro Phe Met Pro Ile Pro Phe Ser Leu Ser His Leu Ser Pro
      130              135              140
Tyr
145

```

<210> 2163

<211> 657

<212> DNA

<213> Homo sapiens

<400> 2163

```

tattttaaattc ttataaaaa aggtaggagg atcaggactt cgacccccctt aaaacgcggc
60
ggcctccctc caatccacct ccacttecta caccaccccc gctctcccc ccccccttt
120
tgggtccggg ttggaagggt ggggtgaaatg ggaaccgaat accaatttca cccgggaacc
180
agtaatgcc atgataaccg ccaagttggg accgaagtgt ggatccataa gtacgggccc
240
ccagtggggt ggaattgggt taagccccct cccagccttt ctccgaccgc gtgctcgcgc
300
agacatgccca agaggctctc tctccaggag agccacctgt gaaacccacc cggcacgtgc
360
ctccccaccac tgtgcacaga cgagtgcctg ggctccagag agggaggagg ctgaaggcct
420
cagacaggag tccgtcccggt ccagtcccat catcccaaga aatcccgcc cgcactccct
480
gcagctccat ggctcaacaa ggtgcggatg cctgctggac ctggctgctt tccatccaac
540
tttgatccct tccccagag gaagagtgtc acctaggggac aagtgtgtgt cgcacaggca
600
tgcagcctgg tctcttgctc aggcggcttg cgcagattcc tagaggaatc tgcagcg
657

```

<210> 2164

<211> 152

<212> PRT

<213> Homo sapiens

<400> 2164

```

Met Pro Met Ile Thr Ala Lys Leu Gly Pro Lys Leu Gly Ser Ile Ser
  1              5              10              15
Thr Gly Gly Gln Trp Gly Gly Ile Gly Leu Ser Pro Leu Pro Ala Phe
      20              25              30
Leu Arg Pro Arg Ala Pro Ser Asp Met Pro Arg Gly Ser Leu Ser Arg
      35              40              45
Arg Ala Thr Cys Glu Thr His Pro Ala Cys Ser Ser His His Cys Ala
      50              55              60
Gln Thr Ser Ala Trp Ala Pro Glu Arg Glu Gly Ala Glu Gly Leu Arg

```

```

65          70          75          80
Gln Glu Ser Val Pro Ser Ser Pro Ile Ile Pro Arg Asn Ile Arg Pro
      85          90          95
Asp Ser Leu Gln Leu His Gly Ser Thr Arg Cys Gly Cys Leu Leu Asp
      100          105          110
Leu Ala Ala Phe His Pro Thr Leu Ile Pro Ser Pro Arg Gly Arg Val
      115          120          125
Leu Pro Arg Asp Lys Cys Gly Ala His Arg His Ala Ala Trp Ser Leu
      130          135          140
Ala Gln Ala Ala Cys Ala Asp Ser
145          150

<210> 2165
<211> 962
<212> DNA
<213> Homo sapiens

<400> 2165
nctttctcat cgacagcgac gcacaaccgg cgacatcacc ggtgacgggt caaggtggga
60
gcccgagggc ccgccgtgaa cttattgtgt cgtcttatgg aagaaaagtc actcggaagt
120
accgtaaact accccagcgc ctcatccccc gaatctgttc gccatctgct gtcgccccgt
180
cgcttaaggc atcacccac tagactgacc gaagtctcgc cgaggggaggc tagggaggct
240
taggtggcca ggaatgacat cgggacgacg tctacgcgtc gaataggcag cggacgtacg
300
tcgagtagccg gccgtacggt ggtgtcttct gaccgcacac gcagagctat cgctaaaaga
360
ttgatggccc gcacctcagc tatgacgacg gccactctag aggaatgggg tcgtcgacac
420
tcttggttcc gtgatctgtc agccgaagaa agatcgtgga tctcgatcgt ggctcgtca
480
ggatttgacg gcttcgtcca gtggtttgct gacgatgacg ccgagcccta ctccccacc
540
gacgtcttcg acgtggcgcc ccggtccatg acccgcaaga tctccttgca ccagacagtc
600
gagctctgcc gcaccacgat tgacgtcgtt gaggcacaaa ttgagaccga aatgccacgc
660
ggtgatcgcc aagtgcgtgc cactgccatc gttcactact ccgcgcagggt ggccttcgcc
720
gccgcgaggg ttacgcgcyg agccgcgcaa cgtcgcgcta cctgggatga acgtctggaa
780
tcctcgtcgt ttgatgccgt cgtgcgagcc gacgccgatg aacagctcat ctccgcagct
840
tctactctcg gctggcgccc gggcatcaac ctctgcgtcg ttgtcggggc gggcccgagc
900
accgagcatg aactccacgt gctgcgacgt gatggagaac gcattgcagat gacggtgcta
960
gc
962

<210> 2166

```


<211> 239

<212> PRT

<213> Homo sapiens

<400> 2166

```

Val Ala Arg Asn Asp Ile Gly Thr Thr Ser Thr Arg Arg Ile Gly Ser
 1           5           10           15
Gly Arg Thr Ser Ser Thr Gly Arg Thr Val Val Ser Ser Asp Arg Thr
 20           25           30
Arg Arg Ala Ile Ala Lys Arg Leu Met Ala Arg Thr Ser Ala Met Thr
 35           40           45
Thr Ala Thr Leu Glu Glu Met Gly Arg Arg His Ser Trp Phe Arg Asp
 50           55           60
Leu Ser Ala Glu Glu Arg Ser Trp Ile Ser Ile Val Ala Arg Ser Gly
 65           70           75           80
Ile Asp Gly Phe Val Gln Trp Phe Ala Asp Asp Ala Glu Pro Tyr
 85           90           95
Ser Pro Thr Asp Val Phe Asp Val Ala Pro Arg Ser Met Thr Arg Lys
100           105           110
Ile Ser Leu His Gln Thr Val Glu Leu Val Arg Thr Thr Ile Asp Val
115           120           125
Val Glu Ala Gln Ile Glu Thr Glu Met Pro Arg Gly Asp Arg Gln Val
130           135           140
Leu Arg Thr Ala Ile Val His Tyr Ser Arg Glu Val Ala Phe Ala Ala
145           150           155           160
Ala Glu Val Tyr Ala Arg Ala Ala Glu Arg Gly Thr Trp Asp Glu
165           170           175
Arg Leu Glu Ser Leu Val Val Asp Ala Val Val Arg Ala Asp Ala Asp
180           185           190
Glu Gln Leu Ile Ser Arg Ala Ser Thr Leu Gly Trp Arg Pro Gly Ile
195           200           205
Asn Leu Cys Val Val Val Gly Arg Ala Pro Thr Thr Glu His Glu Leu
210           215           220
His Val Leu Arg Arg Asp Gly Glu Arg Met Gln Met Thr Val Leu
225           230           235

```

<210> 2167

<211> 325

<212> DNA

<213> Homo sapiens

<400> 2167

```

accggtgcag tttgtgaggg gttggtgacg ccgcatcggg aggttcacgc cgtcacggcg
60
catccacatt atcccgactg gaagatctcg ccaggttacg gacagtggtc gcgtacgcaa
120
cagatcgaca gtgtgactgt gacgcgagtc agacacttcg tcccgcggcg tcccacggcg
180
attcttcgag cggtgtctga ggtgacgttc gggttgcgtc tctgcgcgt cgttgggca
240
agcaccgcgg cgattgtggc tgtgtcgcgg gccttgcctc cgacgcggtc gcgcgggtcg
300
tgcgctgacg tcccacagca taccc
325

```

<210> 2168
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 2168
 Thr Gly Ala Val Cys Glu Gly Leu Val Thr Pro Asp Arg Glu Val His
 1 5 10 15
 Ala Val Thr Ala His Pro His Tyr Pro Asp Trp Lys Ile Ser Pro Gly
 20 25 30
 Tyr Gly Gln Trp Ser Arg Ser Glu Gln Ile Asp Ser Val Thr Val Thr
 35 40 45
 Arg Val Arg His Phe Val Pro Arg Arg Pro Thr Ala Ile Leu Arg Ala
 50 55 60
 Val Ser Glu Val Thr Phe Gly Leu Arg Leu Cys Ala Val Arg Trp Arg
 65 70 75 80
 Ser Thr Ala Ala Ile Val Ala Val Ser Pro Ala Leu Leu Ser Thr Arg
 85 90 95
 Ser Arg Gly Ser Cys Ala Asp Leu Pro Gln His Thr
 100 105

<210> 2169
 <211> 309
 <212> DNA
 <213> Homo sapiens

<400> 2169
 gaggacgcct acgtgctcat caccagggc aagatctcgg cgatcgccga cgtcctgccg
 60
 atcctggaga aggtcgtaaa ggccggcaag ccgctgctcg tcacgcgcga ggacatcgac
 120
 ggggaggccc tgctcaccct cgtcgtcaat aagatccgcg gtaccttcag ctccgtggca
 180
 gtcaaggcgc ccggtctcgg tgaccgcgcg aaggcaatgc tgcaggacat cgccaccctc
 240
 accggtggtc aggtcgtcgc tcccagaggt gggtcgaagc tcgaccaggt gggcctcgag
 300
 gttcagggc
 309

<210> 2170
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 2170
 Glu Asp Ala Tyr Val Leu Ile Thr Gln Gly Lys Ile Ser Ala Ile Ala
 1 5 10 15
 Asp Val Leu Pro Ile Leu Glu Lys Val Val Lys Ala Gly Lys Pro Leu
 20 25 30
 Leu Val Ile Ala Glu Asp Ile Asp Gly Glu Ala Leu Ser Thr Leu Val
 35 40 45
 Val Asn Lys Ile Arg Gly Thr Phe Ser Ser Val Ala Val Lys Ala Pro

```

      50              55              60
Gly Phe Gly Asp Arg Arg Lys Ala Met Leu Gln Asp Ile Ala Thr Leu
65              70              75              80
Thr Gly Gly Gln Val Val Ala Pro Glu Val Gly Leu Lys Leu Asp Gln
      85              90              95
Val Gly Leu Glu Val Gln Gly
      100

```

```

<210> 2171
<211> 518
<212> DNA
<213> Homo sapiens

```

```

<400> 2171
cgcgtaatgt gtattaaggt ccttggtggc tcgcatcgcc gttatgcagc aatcggtgat
60
atcatcaaaag tttagtgaa ggaagcaatt cctcgaggaa aaattaaaaa aggtaatggt
120
cattcagctg tggtagtgcg taccagaaaa ggtgtacgtc gtcccgatgg ttctgttatt
180
cgttttgatc gcaacgcagc ggttatcttg aatgcaaaca accagccagt cggtacacgt
240
atcttttgcc ctgtaacccg tgagcttcga aatgaaaatt tcattgaagt tgtttcactg
300
gcgccagaag tactgttaagg aaccgaaaaa ggcagcaaaa ataaaacgtg acgatgaagt
360
aattgttatt gccggttaaag ataaaggtaa aactgggaaa gttctctcaag ttttaactaa
420
cggtaaagta attattgaag gtgtaaatgt tcaaaagaaa caccaaaaac caaacctca
480
agcgggcggtg gaaggcgga tcatgaaca gaatgcac
518

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```

<210> 2172
<211> 105
<212> PRT
<213> Homo sapiens

```

```

<400> 2172
Arg Val Met Cys Ile Lys Val Leu Gly Gly Ser His Arg Arg Tyr Ala
1              5              10              15
Ala Ile Gly Asp Ile Ile Lys Val Ser Val Lys Glu Ala Ile Pro Arg
20              25              30
Gly Lys Ile Lys Lys Gly Asn Val His Ser Ala Val Val Arg Thr
35              40              45
Arg Lys Gly Val Arg Arg Pro Asp Gly Ser Val Ile Arg Phe Asp Arg
50              55              60
Asn Ala Ala Val Ile Leu Asn Ala Asn Asn Gln Pro Val Gly Thr Arg
65              70              75              80
Ile Phe Gly Pro Val Thr Arg Glu Leu Arg Asn Glu Asn Phe Met Lys
85              90              95
Ile Val Ser Leu Ala Pro Glu Val Leu
      100              105

```

<210> 2173
 <211> 475
 <212> DNA
 <213> Homo sapiens

<400> 2173
 nntggggaag aaatgccggt gcatgcactt tgtgcagcat taggtgcagg ggtgatgcag
 60
 cgggcgcggtg ccttttgcgg cggggtttcg agcattcatc tggatgcagc attttcgcac
 120
 gcatttcttg taccctcgtc atgcgtttct ccccatgcac acacattatc gcctttgcac
 180
 ccgcagggag gcatggaata cctcgtgaaa tggaagggat ggtcgcagaa gtacagcaca
 240
 tgggaaccgg aggaaaacat cctggatgct cgcttgctcg cagcctttga ggaaaggga
 300
 agagagatgg agctctatgg ccccaaaaag cgtggaccca agcccaaaac ctctccttc
 360
 aaagcgccag ccaaggcaaa ggccaaaact tacgagtttc gaagtgactc agccaggggc
 420
 atccggatcc cctaccctgg ccgctcgccc caggacctgg cctccacttc ccggg
 475

<210> 2174
 <211> 158
 <212> PRT
 <213> Homo sapiens

<400> 2174
 Xaa Gly Glu Glu Met Pro Val His Ala Leu Cys Ala Ala Leu Gly Ala
 1 5 10 15
 Gly Val Met Gln Arg Ala Arg Ala Phe Cys Gly Gly Val Ser Ser Ile
 20 25 30
 His Leu Val His Ala Phe Ser His Ala Phe Leu Val Ser Ser Ser Cys
 35 40 45
 Val Ser Pro His Ala His Thr Leu Ser Pro Leu His Pro Gln Gly Arg
 50 55 60
 Met Glu Tyr Leu Val Lys Trp Lys Gly Trp Ser Gln Lys Tyr Ser Thr
 65 70 75 80
 Trp Glu Pro Glu Glu Asn Ile Leu Asp Ala Arg Leu Leu Ala Ala Phe
 85 90 95
 Glu Glu Arg Glu Arg Glu Met Glu Leu Tyr Gly Pro Lys Lys Arg Gly
 100 105 110
 Pro Lys Pro Lys Thr Phe Leu Leu Lys Ala Gln Ala Lys Ala Lys Ala
 115 120 125
 Lys Thr Tyr Glu Phe Arg Ser Asp Ser Ala Arg Gly Ile Arg Ile Pro
 130 135 140
 Tyr Pro Gly Arg Ser Pro Gln Asp Leu Ala Ser Thr Ser Arg
 145 150 155

<210> 2175
 <211> 462
 <212> DNA
 <213> Homo sapiens

<400> 2175
 cgcgacaccc tctttgtggtg gcgccttctt tctccgaatt cgcgaaccct ccagactctg
 60
 gccccaggagg ttgtcgagcg tggagccgat atcggcattg ccaactgatgg tgacgcagac
 120
 cgcctcggtg tcattgatga ccagggggcat ttcttgcac ccaaccagat cctcgtattg
 180
 ctgtacacat accttctgga ggacaaggga tggcaggtgc cctgcgtgcg taacctcgcg
 240
 acgacccacc tgettgaaccg tgtcgccgag gccacgggc agacctgtta cgaggtaccg
 300
 gtcggattta agtgggtgtc gtccaagatg gccgagacca acgccgtcat cgggtggtgag
 360
 tcctccggtg gtttgacctg ccagggggcat attgcaggca aggatggtgt ctatgctggc
 420
 accctgctgg tggaaatgat cgccaagcgg ggtaagaagc tt
 462

<210> 2176
 <211> 154
 <212> PRT
 <213> Homo sapiens

<400> 2176
 Arg Asp Thr Leu Phe Gly Gly Arg Leu Pro Ser Pro Asn Ser Arg Thr
 1 5 10 15
 Leu Gln Thr Leu Ala Gln Glu Val Val Glu Arg Gly Ala Asp Ile Gly
 20 25 30
 Ile Ala Thr Asp Gly Asp Ala Asp Arg Leu Gly Ile Ile Asp Asp Gln
 35 40 45
 Gly His Phe Leu His Pro Asn Gln Ile Leu Val Leu Leu Tyr Thr Tyr
 50 55 60
 Leu Leu Glu Asp Lys Gly Trp Gln Val Pro Cys Val Arg Asn Leu Ala
 65 70 75 80
 Thr Thr His Leu Leu Asp Arg Val Ala Glu Ala His Gly Gln Thr Cys
 85 90 95
 Tyr Glu Val Pro Val Gly Phe Lys Trp Val Ser Ser Lys Met Ala Glu
 100 105 110
 Thr Asn Ala Val Ile Gly Gly Glu Ser Ser Gly Gly Leu Thr Val Gln
 115 120 125
 Gly His Ile Ala Gly Lys Asp Gly Val Tyr Ala Gly Thr Leu Leu Val
 130 135 140
 Glu Met Ile Ala Lys Arg Gly Lys Lys Leu
 145 150

<210> 2177
 <211> 478
 <212> DNA
 <213> Homo sapiens

<400> 2177
 ctcgagaatc atgacggcga cgacgtgact atctccaccc gtgtgcctcg tgacggcggg
 60

accttggact cgattgtcgg cgtgctggcc ggggcatacct ggtatcagcg ggagatccac
 120
 gacttttttt gtgtgaggtt tgtcggccct ggggcagatg atcgtgcctt ccttgtccac
 180
 gatgcaccga aaccgcccct gcgcaaggaa gctgtgttgg cgcagcgagc tgacaccgtg
 240
 tggccgggtg cggctgacca ggctggctcg aagtccgcga gtcgacgtt gccgtcggc
 300
 gttcctgacc ctgagacgtg gcggcgatc aaagacggcg aggatatcc ggatgccgag
 360
 gtcacgcggg ccattgtctg ccggcgcccc cgatcagctg cccgtcgaat ggcaagcacg
 420
 gcgtcaggca ggcaggcatg agacattcga ctatcaacct tgacgtcgac gcgtgcac
 478

<210> 2178

<211> 146

<212> PRT

<213> Homo sapiens

<400> 2178

Leu	Glu	Asn	His	Asp	Gly	Asp	Asp	Val	Thr	Ile	Ser	Thr	Arg	Val	Pro
1				5				10					15		
Arg	Asp	Gly	Gly	Thr	Leu	Asp	Ser	Ile	Val	Gly	Val	Leu	Ala	Gly	Ala
		20						25					30		
Ser	Trp	Tyr	Gln	Arg	Glu	Ile	His	Asp	Phe	Phe	Gly	Val	Arg	Phe	Val
		35				40						45			
Gly	Pro	Gly	Ala	Asp	Asp	Arg	Ala	Leu	Leu	Val	His	Asp	Ala	Pro	Lys
	50					55				60					
Pro	Pro	Leu	Arg	Lys	Glu	Ala	Val	Leu	Ala	Gln	Arg	Ala	Asp	Thr	Val
	65			70					75				80		
Trp	Pro	Gly	Ala	Ala	Asp	Gln	Ala	Gly	Ser	Lys	Ser	Ala	Ser	Arg	Arg
			85					90					95		
Leu	Pro	Val	Gly	Val	Pro	Asp	Pro	Glu	Thr	Trp	Arg	Arg	Ile	Lys	Asp
			100					105					110		
Gly	Glu	Asp	Ile	Pro	Asp	Ala	Glu	Val	Ile	Ala	Ala	Met	Ser	Gly	Arg
		115				120						125			
Arg	Pro	Arg	Ser	Ala	Ala	Arg	Arg	Met	Ala	Ser	Thr	Ala	Ser	Gly	Arg
	130					135						140			
Gln	Ala														
145															

<210> 2179

<211> 296

<212> DNA

<213> Homo sapiens

<400> 2179

gtgcacttcc gaggaggcgt cgagcgtcgc attaacgggg ccggcgcggt gggcgcacac
 60
 aagacgtcga tgctgcagga tctggaacng gaccgcgcga tggagatcga cccgctcgtc
 120
 tccgctcgtc aggagatggg acgcctggcc aacgtgccga cgcccacgct cgatgctggt
 180

ctcccactga tcaagcaacg tgaattcatg acgaagccgg atgccgtggc ggccgcgcag
 240
 gaacgtctgg ctaaagcggc ataaaccagc cgccgaaacc agcggcataa cgcggn
 296

<210> 2180
 <211> 87
 <212> PRT
 <213> Homo sapiens

<400> 2180
 Val His Phe Arg Val Asp Val Glu Arg Arg Ile Asn Gly Ala Gly Ala
 1 5 10 15
 Val Gly Ala His Lys Thr Ser Met Leu Gln Asp Leu Asp Xaa Asp Arg
 20 25 30
 Ala Met Glu Ile Asp Pro Leu Val Ser Val Val Gln Glu Met Gly Arg
 35 40 45
 Leu Ala Asn Val Pro Thr Pro Thr Leu Asp Val Val Leu Pro Leu Ile
 50 55 60
 Lys Gln Arg Glu Phe Met Thr Lys Pro Asp Ala Val Ala Ala Ala Gln
 65 70 75 80
 Glu Arg Leu Ala Lys Ala Ala
 85

<210> 2181
 <211> 387
 <212> DNA
 <213> Homo sapiens

<400> 2181
 ngcgccgccg gatggatcat agtctggctc gatgcatcac gtgcgcgcgc ggcgcgcgctg
 60
 tcgattcccg acggcatgat cgcggcactc gaccgtaccg gcaaggcgca aacgcacctc
 120
 acgctggcat cgccggaagc ggggtgctgc agcgaactga acgtgcgcga cggtgcgatg
 180
 gtgcgcgcgc ggcagacgct cgcgaagatt tcgggcctct cgaagctctg gctgatcgct
 240
 gagattcccg aagcgctcgc gctcgatcgc cgtccgggca tgaccgtcga cgcgacgttc
 300
 tcggggcgat cgacgcagca ttccaccggg cgtatccgcg agatcctgcc gggcatcacc
 360
 accagtagcc gcacgcttca ggcgcgc
 387

<210> 2182
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 2182
 Xaa Ala Pro Gly Trp Ile Ile Val Trp Leu Asp Ala Ser Arg Ala Arg
 1 5 10 15
 Met Arg Ala Leu Ser Ile Pro Asp Gly Met Ile Ala Ala Leu Asp Arg

```

                20                25                30
Thr Gly Lys Ala Gln Thr His Leu Thr Leu Ala Ser Pro Glu Ala Gly
      35                40                45
Val Val Ser Glu Leu Asn Val Arg Asp Gly Ala Met Val Ala Pro Gly
      50                55                60
Gln Thr Leu Ala Lys Ile Ser Gly Leu Ser Lys Leu Trp Leu Ile Val
65                70                75                80
Glu Ile Pro Glu Ala Leu Ala Leu Asp Ala Arg Pro Gly Met Thr Val
      85                90                95
Asp Ala Thr Phe Ser Gly Asp Pro Thr Gln His Phe Thr Gly Arg Ile
      100                105                110
Arg Glu Ile Leu Pro Gly Ile Thr Thr Ser Ser Arg Thr Leu Gln Ala
      115                120                125
Arg

```

<210> 2183
 <211> 310
 <212> DNA
 <213> Homo sapiens

```

<400> 2183
aagcttgaaa aacaaatttg tgcacagtct gataacccaa aaatgactga tggattggct
60
ctgcattttc caagcagggg ggggtcgggc atggagaatg aaacattctg agaaaagact
120
taaatgtgga aacttttggg tcaagagggg attctaggag atacaagaaa tatctcctgg
180
gggcatccaa agggaataac actgtaatat tgagtgatgt atggttccat tgcccagagga
240
atagggatga aaaccataaa ctcccttggg tgggtattaa cttatcanc aaagttacca
300
tanataatgg
310

```

<210> 2184
 <211> 100
 <212> PRT
 <213> Homo sapiens

```

<400> 2184
Met Val Thr Leu Xaa Asp Lys Leu Ile Pro Thr Gln Arg Ser Leu Trp
1                5                10                15
Phe Ser Ser Leu Phe Leu Gly Gln Trp Asn His Thr Ser Leu Lys Ile
      20                25                30
Thr Val Leu Phe Pro Leu Asp Ala Pro Arg Arg Tyr Phe Leu Tyr Leu
      35                40                45
Leu Glu Tyr Pro Leu Glu Pro Lys Val Ser Thr Phe Lys Ser Phe Leu
      50                55                60
Arg Met Phe His Ser Pro Cys Pro Thr Pro Pro Cys Leu Glu Asn Ala
65                70                75                80
Glu Pro Ile His Gln Ser Phe Leu Gly Tyr Gln Thr Val His Lys Phe
      85                90                95
Val Phe Gln Ala

```


100

<210> 2185

<211> 723

<212> DNA

<213> Homo sapiens

<400> 2185

ngaatatcca tgcagcagct cgtcgacaat tttagcgggtg ccattccctga cgaatcttgac
 60
 tctcttgtga ccctgcccgg agtcgggtcgt aagaccgcca atgttggtttt aggtaaatgcc
 120
 ttccggcatcc ccggaatcac cccggacacc cagctcatgc ggggtatctcg acgtctggggc
 180
 tggaccgatg cgactacccc cgccaagggtg gaaaccgacc tggctgagct ttttgacccg
 240
 tctgaatggg tgatgtttgtg tcaccgcctc atctggcacg ggcggcgggcg ctgtcactcg
 300
 cgcgctcctg cctgcgggggt atgcccgggt gccgagtggt gcccgctcct cggggaaggc
 360
 ccaacgggatc ccgaggaggc cgccacgtta gtccggggagc cgcgtcgatg aggggggatga
 420
 acgttttctcg cgcggtgatg gccgccttga tgtttgctgg ctgcggggga gatcggggca
 480
 tagctcatca gcgtgaaaaat gccggaatac cggggtgctc gcatttgccg tcggggccga
 540
 ttgcgaaaaa gtccggggccg gccacagagg gccggcccat gcccgatcac ggcttgcaat
 600
 gccttggtga ggggcccagc atctccatgt ctccggcgac atcgaggggc gtgaccgtcg
 660
 tgacgatctg ggcgtcgtgg tgtcgaccat gtctagtgta ggctccgctc attgcgaacg
 720
 cgt
 723

<210> 2186

<211> 136

<212> PRT

<213> Homo sapiens

<400> 2186

Xaa Ile Ser Met Gln Gln Leu Val Asp Asn Phe Asp Gly Ala Ile Pro
 1 5 10 15
 Asp Asp Leu Asp Ser Leu Val Thr Leu Pro Gly Val Gly Arg Lys Thr
 20 25 30
 Ala Asn Val Val Leu Gly Asn Ala Phe Gly Ile Pro Gly Ile Thr Pro
 35 40 45
 Asp Thr His Val Met Arg Val Ser Arg Arg Leu Gly Trp Thr Asp Ala
 50 55 60
 Thr Thr Pro Ala Lys Val Glu Thr Asp Leu Ala Glu Leu Phe Asp Pro
 65 70 75 80
 Ser Glu Trp Val Met Leu Cys His Arg Leu Ile Trp His Gly Arg Arg
 85 90 95
 Arg Cys His Ser Arg Arg Pro Ala Cys Gly Val Cys Pro Val Ala Glu

```

                100                105                110
Trp Cys Pro Ser Phe Gly Glu Gly Pro Thr Asp Pro Glu Glu Ala Ala
                115                120                125
Thr Leu Val Arg Glu Pro Arg Arg
                130                135

```

<210> 2187

<211> 342

<212> DNA

<213> Homo sapiens

<400> 2187

```

nnacgcgtga aggatgcgcc ccggtcgacc ggccatccgt cttgcctcgc aggcattccag
60
cccgccatat gctgcaaccg caacaccgct ttgccgtcgc atggcatctc cactccggat
120
cgcctcgtac cagcagggct atcggcgcga aagaagtgtc cggggcagaa tcccgcgag
180
gaaagcccgga tggagtggaa gacgctgttc aacgacacc gcttcggagg ggtcgccagc
240
ctcgtatggga cgcgcgacg gtcggagttc cagaaggacc acgaccggat catcttctcc
300
gaagccttcc gcaagctggg ccgcaagacc caggtgcacc cg
342

```

<210> 2188

<211> 51

<212> PRT

<213> Homo sapiens

<400> 2188

```

Met Glu Trp Lys Thr Leu Leu Asn Asp Thr Arg Phe Gly Gly Val Ala
  1          5          10          15
Ser Leu Asp Gly Thr Arg Gly Arg Ser Glu Phe Gln Lys Asp His Asp
          20          25          30
Arg Ile Ile Phe Ser Glu Ala Phe Arg Lys Leu Gly Arg Lys Thr Gln
          35          40          45
Val His Pro
          50

```

<210> 2189

<211> 1412

<212> DNA

<213> Homo sapiens

<400> 2189

```

ntcgcttcat ggtgcgcaat tacgacaacg ccaagtctca gaatgccgag gcttacaccg
60
cgtttcttcca cgcatgtcta gatgccgggg tcaacctgcc gccatcgtgc tttgagggct
120
ggttctcttc ggacgtcac gacgacgaag ctttcgaggt tttccgcgcc gccctgccga
180
gggctgcccc ggcggtgcc caggtgatca gtgcctgaca ccgggctgac ttcgcaggtc
240

```

atcaggagcaa tctgtgcctg gttcgacgcc aacggacgcg atctgccgtg ggcgcgaccc
 300
 ggcaacctecg cgtggggcgt gcttggttagc gaggtcatga gccaacagac ccgatgtcc
 360
 cgggtgatcg ggccgtggca cgagtggatg aaccgctggc ccacccctga tgatttggcg
 420
 gaggaggact ctggggaagc ggttgccgcg tgggggcgcc tgggttaccg gcgtcggggc
 480
 ttacgcctgc attcctgtgc cgtcacgac gccaccgagc acgacggggg tgtgcccaac
 540
 agtgacgacg agctcgtcgc cctcccggtt attggcgact acaccgcgag cgcagtcgtc
 600
 tcttttcgct ttggcggccg cgcacacgtg cttgacacca atgtacgtcg cctcatcgct
 660
 agagcagagt ctgggatcgc aaactgtcca acctcgggtg cgagggctga gcggttagtc
 720
 gccgacgcgt tgggtcccca cgaagacgtc cgagcggcca agtgggcggt ggcgtcgatg
 780
 gaattggggg cactgggtatg cacggcgcggt tctccgcagt gtgaggtctg ccgatccgg
 840
 gatggctgca ggtgggtgat cgacggtagg ccggacaatg ccccgccccg tcgaggacag
 900
 ccatggaagg gcacggatcg ccagtgcgcg ggctgatta tggacgtggt gcgcaacagc
 960
 cctcacgggg tgaaggtcca gatggctctt tccgcctggc cagagctcga tcaggcatca
 1020
 aggtgcctgg aatccttact cgatgacggt ttagtgacc gagcaggtaa ccttattagc
 1080
 ctgtgacctg agaaattctt ggccccgacc acccaaacag accgagtcca gcagtgatgc
 1140
 cgctgggcta tccttagagg cggtcctcaa attggatcag ccaaaccacg tcaccgatca
 1200
 agacaccatg agcacaacac ccaaacagcc gcgcacggcg acagctgccc gacgccgaca
 1260
 cattgtcgac catctgcgtt ctttggggca ctcggagtcc atcggagatc tttaccaact
 1320
 gttcgggtgc tctacatcga cgattcgccg cgatgtcgat gccctctcgg atgaatccaa
 1380
 gatctggaag atttcggggg gagacgtcat ga
 1412

<210> 2190

<211> 292

<212> PRT

<213> Homo sapiens

<400> 2190

Ser	Val	Pro	Asp	Thr	Gly	Leu	Thr	Ser	Gln	Val	Ile	Glu	Ala	Ile	Cys
1				5				10						15	
Ala	Trp	Phe	Asp	Ala	Asn	Gly	Arg	Asp	Leu	Pro	Trp	Arg	Arg	Pro	Gly
			20					25					30		
Thr	Ser	Ala	Trp	Gly	Val	Leu	Val	Ser	Glu	Val	Met	Ser	Gln	Gln	Thr
			35				40					45			
Pro	Met	Ser	Arg	Val	Ile	Gly	Pro	Trp	His	Glu	Trp	Met	Asn	Arg	Trp

50 55 60
 Pro Thr Pro Asp Asp Leu Ala Glu Glu Asp Ser Gly Glu Ala Val Ala
 65 70 75 80
 Ala Trp Gly Arg Leu Gly Tyr Pro Arg Arg Ala Leu Arg Leu His Ser
 85 90 95
 Cys Ala Val Thr Ile Ala Thr Glu His Asp Gly Gly Val Pro Asn Ser
 100 105 110
 Asp Asp Glu Leu Val Ala Leu Pro Gly Ile Gly Asp Tyr Thr Ala Ser
 115 120 125
 Ala Val Val Ser Phe Ala Phe Gly Gly Arg Ala Thr Val Leu Asp Thr
 130 135 140
 Asn Val Arg Arg Leu Ile Ala Arg Ala Glu Ser Gly Ile Ala Asn Cys
 145 150 155 160
 Pro Thr Ser Val Thr Arg Ala Glu Arg Val Val Ala Asp Ala Leu Val
 165 170 175
 Pro Asp Glu Asp Val Arg Ala Ala Lys Trp Ala Val Ala Ser Met Glu
 180 185 190
 Leu Gly Ala Leu Val Cys Thr Ala Arg Ser Pro Gln Cys Glu Val Cys
 195 200 205
 Pro Ile Arg Asp Gly Cys Arg Trp Val Ile Asp Gly Arg Pro Asp Asn
 210 215 220
 Ala Pro Ala Arg Arg Gly Gln Pro Trp Lys Gly Thr Asp Arg Gln Cys
 225 230 235 240
 Arg Gly Val Ile Met Asp Val Val Arg Asn Ser Pro His Gly Val Lys
 245 250 255
 Val Gln Met Ala Leu Ser Ala Trp Pro Glu Leu Asp Gln Ala Ser Arg
 260 265 270
 Cys Leu Glu Ser Leu Leu Asp Asp Gly Leu Val His Arg Arg Gly Asn
 275 280 285
 Leu Ile Ser Leu
 290

<210> 2191

<211> 502

<212> DNA

<213> Homo sapiens

<400> 2191

nnacgcgctcg agaatctcta ctccctgcccg aacaacgtcc ggcttcgtca ggtcacgat
 60
 gactcccttg acgacgacac catttcgggg ggtagccccc attggtgctg cctcatggac
 120
 tacattgaat cccgttcaat cctgaacggc gttcaggacg tctccagtct cggaaggacc
 180
 agagtattgc tgaatctagc cgacatgacc gaacgcggcg tgagggggga gtccattacc
 240
 cgcgaggagg ccctcgagat tcttcgcagc agtgatgatg agctcatgtc aatcatcgcc
 300
 gccgcgggaa aagtgcgctg ccactttttc gataaccggg ttcgcctcaa ctacctggtc
 360
 aacctcaagt ccggcctgtg tcccgaagac tgcctctatt gctcgcagcg tctgggatcg
 420
 cgtgccgaga tcacgaaata ctctggggcc gatccgcaga aggtacacga cgccgtcgag
 480

gctgggattg ccggtgggtg ac
502

<210> 2192
<211> 104
<212> PRT
<213> Homo sapiens

<400> 2192
Leu Asn Leu Ala Asp Met Thr Glu Arg Gly Leu Arg Gly Glu Ser Ile
1 5 10 15
Thr Arg Glu Glu Ala Leu Glu Ile Leu Arg Ser Ser Asp Asp Glu Leu
20 25 30
Met Ser Ile Ile Ala Ala Ala Gly Lys Val Arg Arg His Phe Phe Asp
35 40 45
Asn Arg Val Arg Leu Asn Tyr Leu Val Asn Leu Lys Ser Gly Leu Cys
50 55 60
Pro Glu Asp Cys Ser Tyr Cys Ser Gln Arg Leu Gly Ser Arg Ala Glu
65 70 75 80
Ile Thr Lys Tyr Ser Trp Ala Asp Pro Gln Lys Val His Asp Ala Val
85 90 95
Glu Ala Gly Ile Ala Gly Gly Ala
100

<210> 2193
<211> 321
<212> DNA
<213> Homo sapiens

<400> 2193
ccatggggaa tgcagagcac ggacagtcac acagactgtc ctctctgtgcc ttctggaccc
60
aacatactcc tcttgccaac tgggtattac tggaccttac tgggccttac tggacccaac
120
atactcctct tgccaactgg ggatttaaaa attttaaaag cccctttatc tccctccaca
180
agtcattgtac tgccaacagg gacacactgt tttctttgga aaccctgctg tgtgccccaga
240
cagaggtccc actgccctgg gacagctccc ttgcctanag ggaaggagg gtgtgtgtgc
300
tgtgtgtgt taggttgggg a
321

<210> 2194
<211> 106
<212> PRT
<213> Homo sapiens

<400> 2194
Met Gly Asn Ala Glu His Gly Gln Ser His Arg Leu Ser Ser Leu Ala
1 5 10 15
Phe Trp Thr Gln His Thr Pro Leu Ala Asn Trp Val Leu Leu Asp Leu
20 25 30
Thr Gly Pro Tyr Trp Thr Gln His Thr Pro Leu Ala Asn Trp Gly Phe

```

          35              40              45
Lys Asn Phe Lys Ser Pro Phe Ile Ser Leu His Lys Ser Cys Thr Ala
   50              55              60
Asn Arg Asp Thr Leu Phe Ser Leu Glu Thr Leu Leu Cys Ala Gln Thr
   65              70              75              80
Glu Val Pro Leu Pro Trp Asp Ser Ser Leu Ala Xaa Arg Gly Arg Arg
          85              90              95
Val Cys Val Leu Cys Val Phe Arg Leu Gly
          100              105

```

<210> 2195

<211> 504

<212> DNA

<213> Homo sapiens

<400> 2195

```

naccgcgtctc cctacatcaa tgcccaccgc gattgcacct ttgtgtcat gtcacctggc
60
gacgggtgtgg cacaccccaa ctttggcaat atcggtccacg acctgggtgct gttgcacagc
120
ctgggtgtgct gtctgttact ggtccacggt tcgcgcccgc agatcgacag ccgccttgag
180
gcacgaggcc tgggtccgta ttaccacaag ggcattgcgtg tcaccgatgc atcaacgctc
240
gaatgcgtga tcgatgctgt cgggcaactg cgcattgcga ttgaagcgcg cttgtcgatg
300
gacatggcgt cttcgcaat gcagggttcg cgtctgcgcg tagccagcgg caacctggtc
360
actgcgcggc cgatcggcgt gctcgacggt gtggattttc accataccgg cgaagtgcgc
420
cgggtggacc gcaagggcat caacgcctg ctcgatgagc gctcgattgt gctgctgtgc
480
cccttggggt actgcccac cggt
504

```

<210> 2196

<211> 168

<212> PRT

<213> Homo sapiens

<400> 2196

```

Xaa Ala Ser Pro Tyr Ile Asn Ala His Arg Asp Cys Thr Phe Val Val
   1           5           10           15
Met Leu Pro Gly Asp Gly Val Ala His Pro Asn Phe Gly Asn Ile Val
          20           25           30
His Asp Leu Val Leu Leu His Ser Leu Gly Val Arg Leu Val Leu Val
          35           40           45
His Gly Ser Arg Pro Gln Ile Asp Ser Arg Leu Glu Ala Arg Gly Leu
          50           55           60
Val Pro Tyr Tyr His Lys Gly Met Arg Val Thr Asp Ala Ser Thr Leu
          65           70           75           80
Glu Cys Val Ile Asp Ala Val Gly Gln Leu Arg Ile Ala Ile Glu Ala
          85           90           95
Arg Leu Ser Met Asp Met Ala Ser Ser Pro Met Gln Gly Ser Arg Leu

```

```

          100              105              110
Arg Val Ala Ser Gly Asn Leu Val Thr Ala Arg Pro Ile Gly Val Leu
          115              120              125
Asp Gly Val Asp Phe His His Thr Gly Glu Val Arg Arg Val Asp Arg
          130              135              140
Lys Gly Ile Asn Arg Leu Leu Asp Glu Arg Ser Ile Val Leu Leu Ser
          145              150              155              160
Pro Leu Gly Tyr Ser Pro Thr Gly
          165

```

<210> 2197

<211> 351

<212> DNA

<213> Homo sapiens

<400> 2197

```

acaagtcgct cgacgattcg ctttcgggag gcggggccag gaatggtaat gaaacccgag
60
ttatgggggcc ctgcgctcga cgagattgcc gcgggaaaac gtgccggagg ggctgaacag
120
ttagattccg cagtgcagca catccacggt gctactcacg ataaactgtc cggtgtctgtt
180
ccgaaacgct acgatggtcg ggtgtcttgc gcaggcgagg acccgaatgc accgttgcgtg
240
cttgtgccta gcccggctgg tgcagtgttt agtcaaaata aggcacaagc ctggtccaat
300
gaagaccaca ttgtttttgc ctgtgggcgc tatgaaggtt ttgatcaacg c
351

```

<210> 2198

<211> 117

<212> PRT

<213> Homo sapiens

<400> 2198

```

Thr Ser Pro Ser Thr Ile Arg Phe Pro Glu Ala Gly Pro Gly Met Val
 1           5           10           15
Met Lys Pro Glu Leu Trp Gly Pro Ala Leu Asp Glu Ile Ala Ala Gly
 20           25           30
Lys Arg Ala Gly Gly Ala Glu Gln Leu Asp Ser Ala Val Gln His Ile
 35           40           45
His Gly Ala Thr His Asp Lys Leu Ser Gly Ala Val Pro Lys Arg Tyr
 50           55           60
Asp Gly Arg Asp Val Leu Ala Gly Glu Asp Pro Asn Ala Pro Leu Leu
 65           70           75           80
Leu Val Pro Ser Pro Ala Gly Ala Val Phe Ser Gln Asn Lys Ala Gln
 85           90           95
Ala Trp Ser Asn Glu Asp His Ile Val Phe Ala Cys Gly Arg Tyr Glu
100           105           110
Gly Ile Asp Gln Arg
115

```

<210> 2199

<211> 457

<212> DNA

<213> Homo sapiens

<400> 2199

agacgcccgc cgccaagatc tgcattcccta ggccacgcta agaccctggg gaagagcgca
 60
 ggagcccggg agaagggctg gaaggagggg actggacgtg cggagaattc cccctaaaaa
 120
 ggcagaagcc cccgccccca cctcccgagc tccgttcggg cagagcgctt gcctgcctgc
 180
 cgttgctggg ggcgcccacc tcgcccagcc atgccaggcc cggccaccga cgcggggaag
 240
 atccctttct gcgacgcca ggaagaaatc cgtgccgggc tcgaaagctc tgaggcgggc
 300
 ggcggcccg agaggccagg cgcgcgagg cagcggcaga acatcgctct gaggaatgtc
 360
 gtctgatga gcttgctcca cttgggggccc gtgtactccc tgggtgctcat ccccaaagcc
 420
 aagccactca ctctgctctg gggtaaagtc cgccggc
 457

<210> 2200

<211> 152

<212> PRT

<213> Homo sapiens

<400> 2200

Arg Arg Arg Pro Pro Arg Ser Ala Ser Leu Gly His Ala Lys Thr Leu
 1 5 10 15
 Gly Lys Ser Ala Gly Ala Arg Glu Lys Gly Trp Lys Glu Gly Thr Gly
 20 25 30
 Arg Ala Glu Asn Ser Pro Leu Lys Gly Arg Ser Pro Arg Pro His Pro
 35 40 45
 Pro Ser Ser Val Arg Ala Glu Arg Leu Pro Ala Cys Arg Cys Trp Gly
 50 55 60
 Arg Pro Pro Arg Pro Ala Met Pro Gly Pro Ala Thr Asp Ala Gly Lys
 65 70 75 80
 Ile Pro Phe Cys Asp Ala Lys Glu Glu Ile Arg Ala Gly Leu Glu Ser
 85 90 95
 Ser Glu Gly Gly Gly Pro Glu Arg Pro Gly Ala Arg Gly Gln Arg
 100 105 110
 Gln Asn Ile Val Trp Arg Asn Val Val Leu Met Ser Leu Leu His Leu
 115 120 125
 Gly Ala Val Tyr Ser Leu Val Leu Ile Pro Lys Ala Lys Pro Leu Thr
 130 135 140
 Leu Leu Trp Gly Lys Ser Arg Arg
 145 150

<210> 2201

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2201

agtactcgca tggacagcta tgctgtggat ggtggtcgca aattacatgt ttgtggtaac
 60
 aacctgatt gcgatggta tgaagtcgaa gaaggcgaat tcaagatcaa gggttatgat
 120
 ggtccgacta tcccatcgca taaatgtgat ggtgagatgc agcttaaaac gggtcgtttt
 180
 ggtccatatt tcgcatgtac tagctgtgac aatactcgta aggtactcaa gagtgggtcaa
 240
 cctgctccgc cacgtgtaga cccaatcaaa atggagcatc tacgttcaac gaagcatgat
 300
 gattttctcg tcttacgtga gggcgctgct ggttta
 336

<210> 2202

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2202

Ser Thr Ala Met Asp Ser Tyr Val Val Asp Gly Gly Arg Lys Leu His
 1 5 10 15
 Val Cys Gly Asn Asn Pro Asp Cys Asp Gly Tyr Glu Val Glu Glu Gly
 20 25 30
 Glu Phe Lys Ile Lys Gly Tyr Asp Gly Pro Thr Ile Pro Cys Asp Lys
 35 40 45
 Cys Asp Gly Glu Met Gln Leu Lys Thr Gly Arg Phe Gly Pro Tyr Phe
 50 55 60
 Ala Cys Thr Ser Cys Asp Asn Thr Arg Lys Val Leu Lys Ser Gly Gln
 65 70 75 80
 Pro Ala Pro Pro Arg Val Asp Pro Ile Lys Met Glu His Leu Arg Ser
 85 90 95
 Thr Lys His Asp Asp Phe Phe Val Leu Arg Glu Gly Ala Ala Gly Leu
 100 105 110

<210> 2203

<211> 273

<212> DNA

<213> Homo sapiens

<400> 2203

ctcgagagat gcagtcaccag ccgggggtggg aagctgtgca gacagccccg gatctggggac
 60
 gtgatggaaa actcaacaga ctggttcaga tcttggtccc gagcccagag gcaccggggg
 120
 cccccagggc tgtttctccc tggccacacc agtaccaccac ttccaaatgc cctgtaggtg
 180
 accaccaggc cacacaggcc cgtctgaggg gccacaggct gtgcaccatg ggacgcaggc
 240
 ctgtccctgc ctccctccga tgtcctgatg gtg
 273

<210> 2204

<211> 88

<212> PRT

<213> Homo sapiens

<400> 2204

```

Met Gln Ser Gln Pro Gly Trp Glu Ala Val Gln Thr Ala Pro Asp Leu
 1             5             10             15
Gly Arg Asp Gly Lys Leu Asn Arg Leu Val Gln Ile Leu Ala Arg Ser
          20             25             30
Pro Glu Ala Pro Gly Thr Pro Arg Ala Val Ser Pro Trp Pro His Gln
          35             40             45
Tyr Pro Thr Ser Lys Cys Pro Val Gly Asp His Gln Ala Thr Gln Ala
          50             55             60
Arg Leu Arg Gly His Arg Leu Cys Thr Met Gly Arg Arg Pro Val Pro
65             70             75             80
Ala Ser Leu Arg Cys Pro Asp Gly
          85

```

<210> 2205

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2205

```

gnnnnnngng nnnnactggt gtgcatggtt aaaatcctgc aagctactgg gttgccacag
60
catctgtccc actttgtggt ctgcaaatac agcttctggg atcaacagga gccggtgatt
120
gtcgctcctg aagtggacac ctctctctct tccgtcagca aggagccgca ctgcatggtt
180
gtctttgatc attgcaatga gttttctggt aacatcaccc aagactttat cgagcatctt
240
tccgaaggag cattggcaat tgaagtatat ggacataaaa taaacgatcc ccggaaaaac
300
ccgccctgt gggatttggg aatcatccaa gcaaagacac gtagtcttcg ggacagatgg
360
agtgaagtgc ccaggaaatt ggaattc
387

```

<210> 2206

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2206

```

Xaa Xaa Gly Xaa Xaa Leu Val Cys Met Val Lys Ile Leu Gln Ala Thr
 1             5             10             15
Gly Leu Pro Gln His Leu Ser His Phe Val Phe Cys Lys Tyr Ser Phe
          20             25             30
Trp Asp Gln Gln Glu Pro Val Ile Val Ala Pro Glu Val Asp Thr Ser
          35             40             45
Ser Ser Ser Val Ser Lys Glu Pro His Cys Met Val Val Phe Asp His
          50             55             60
Cys Asn Glu Phe Ser Val Asn Ile Thr Glu Asp Phe Ile Glu His Leu
65             70             75             80
Ser Glu Gly Ala Leu Ala Ile Glu Val Tyr Gly His Lys Ile Asn Asp

```

	85		90		95										
Pro	Arg	Lys	Asn	Pro	Ala	Leu	Trp	Asp	Leu	Gly	Ile	Ile	Gln	Ala	Lys
			100					105					110		
Thr	Arg	Ser	Leu	Arg	Asp	Arg	Trp	Ser	Glu	Val	Pro	Arg	Lys	Leu	Glu
			115				120						125		
Phe															

<210> 2207
 <211> 667
 <212> DNA
 <213> Homo sapiens

<400> 2207
 atctccaacc ccgagaccct ctccaatata gccggcttcg agggctacat cgacctgggc
 60
 cgcgagctct ccagcctgca ctactgtctc tgggaggccg tcagccagct ggagcagagc
 120
 atagtatcca aactgggacc cctgcctcgg atcctgaggg acgtccacac agcactgagc
 180
 accccaggta gcgggcagct cccagggacc aatgacctgg cctccacacc gggctctggc
 240
 agcagcagca tctcagctgg gctgcagaag atggtgattg agaacgatct ttccggtctg
 300
 atagatttca cccggttacc gtctccaacc cccgaaaaca aggacttggt ttttgtcaca
 360
 aggtcctccg gggctccagcc etcacctgcc cgcagctcga gttactcgga agccaacgag
 420
 cctgatcttc agatggccaa cggtggcaag agcctctcca tgggtggacct ccaggacgcc
 480
 cgcacgctgg atggggaggc aggctccccg gcggggcccc acgtctctcc cacagatggg
 540
 caggccgctg cagctcagct ggtggccggg tggccggccc gggcaacccc agtgaacctg
 600
 gcagggctgg ccacggtgcg gcgggcaggc cagacaccaa ccacaccagg cacctccgag
 660
 ggcgcg
 667

<210> 2208
 <211> 222
 <212> PRT
 <213> Homo sapiens

<400> 2208
 Ile Ser Asn Pro Glu Thr Leu Ser Asn Thr Ala Gly Phe Glu Gly Tyr
 1 5 10 15
 Ile Asp Leu Gly Arg Glu Leu Ser Ser Leu His Ser Leu Leu Trp Glu
 20 25 30
 Ala Val Ser Gln Leu Glu Gln Ser Ile Val Ser Lys Leu Gly Pro Leu
 35 40 45
 Pro Arg Ile Leu Arg Asp Val His Thr Ala Leu Ser Thr Pro Gly Ser
 50 55 60
 Gly Gln Leu Pro Gly Thr Asn Asp Leu Ala Ser Thr Pro Gly Ser Gly

```

65              70              75              80
Ser Ser Ser Ile Ser Ala Gly Leu Gln Lys Met Val Ile Glu Asn Asp
      85              90
Leu Ser Gly Leu Ile Asp Phe Thr Arg Leu Pro Ser Pro Thr Pro Glu
      100              105              110
Asn Lys Asp Leu Phe Phe Val Thr Arg Ser Ser Gly Val Gln Pro Ser
      115              120              125
Pro Ala Arg Ser Ser Ser Tyr Ser Glu Ala Asn Glu Pro Asp Leu Gln
      130              135              140
Met Ala Asn Gly Gly Lys Ser Leu Ser Met Val Asp Leu Gln Asp Ala
      145              150              155              160
Arg Thr Leu Asp Gly Glu Ala Gly Ser Pro Ala Gly Pro Asp Val Leu
      165              170              175
Pro Thr Asp Gly Gln Ala Ala Ala Ala Gln Leu Val Ala Gly Trp Pro
      180              185              190
Ala Arg Ala Thr Pro Val Asn Leu Ala Gly Leu Ala Thr Val Arg Arg
      195              200              205
Ala Gly Gln Thr Pro Thr Thr Pro Gly Thr Ser Glu Gly Ala
      210              215              220

```

<210> 2209

<211> 353

<212> DNA

<213> Homo sapiens

<400> 2209

```

ngggaagttg tgactagcct cccaaagcca ctctcctgag tgacattgag agcatcctat
60
agagaaggcc atgagagaga tagcactggg acagatgggtg tcagcagagg ggactccaga
120
ccacagcaga agtgaccaag ctgtagcttc cttagatggc cccaagggtg ggaggcttca
180
cacagcagag cctgggtctg gaggcacctt ggggatgttt ttccccatta ggccccctgag
240
ctctatggaa gcacttaact gcctgttccc cgcttattct gtgtttaaac caaggaaaca
300
acatgcctgg ggcttgaaat cctggattca aatcctgact gtgttgtgtg ctt
353

```

<210> 2210

<211> 94

<212> PRT

<213> Homo sapiens

<400> 2210

```

Met Arg Glu Ile Ala Leu Gly Gln Met Val Ser Ala Glu Gly Thr Pro
1      5      10      15
Asp His Ser Arg Ser Asp Gln Ala Val Ala Ser Leu Asp Gly Pro Lys
      20      25      30
Gly Gly Arg Leu His Thr Ala Glu Pro Gly Ser Gly Gly Thr Leu Gly
      35      40      45
Met Phe Phe Pro Ile Arg Pro Leu Ser Ser Met Glu Ala Leu Asn Cys
      50      55      60
Leu Phe Pro Ala Tyr Ser Val Phe Lys Pro Arg Lys Gln His Ala Trp

```

5 70 75 80
 Gly Leu Lys Ser Trp Ile Gln Ile Leu Thr Val Leu Cys Ala
 85 90
 <210> 2211
 <211> 493
 <212> DNA
 <213> Homo sapiens

 <400> 2211
 ctgaccacat ctccgacgat cctagacctc tgttctgcat ctccggacacc accgaactgct
 60
 caactgtacc tgggactgca cagaggggaaa cgattaccaa acccagagac ggggaccgga
 120
 aggaaggagg ggaaggggat ggatccatgt actttggggt tggagaaatg ggggacagca
 180
 agtctctcca acccaaatat agcccccttg ggaggctcct gccccgtctc tgtggatagt
 240
 gagcccagct gcaaggggcgg cctgccaggg acaaacccac caaaaggaaa gatgtttagt
 300
 aaccaagaag aggcctccctg aaagaggcgt ctcccggggc ctccaagccc ggggagcgccc
 360
 ggcggacagg gggcagtggc caagtctgtg cggaccctga ccgcctcaga gaacgagagc
 420
 atgcgcgaaa tcatgcccat caccaagtcg acgacaggcg ccggctggag gcgaccagag
 480
 ctgtcatccc ggg
 493

 <210> 2212
 <211> 126
 <212> PRT
 <213> Homo sapiens

 <400> 2212
 Met Gly Met Thr Leu Arg Met Leu Ser Phe Ser Glu Ala Val Arg Val
 1 5 10 15
 Arg Thr Asp Leu Ala Thr Ala Pro Cys Pro Pro Gly Ala Pro Gly Leu
 20 25 30
 Gly Gly Pro Gly Arg Arg Leu Phe Gln Gly Ala Ser Leu Trp Phe Tyr
 35 40 45
 Asn Ile Phe Pro Phe Gly Gly Phe Val Pro Gly Arg Pro Pro Leu Gln
 50 55 60
 Leu Gly Ser Leu Ser Thr Glu Thr Gly Gln Glu Pro Pro Arg Gly Ala
 65 70 75 80
 Val Phe Gly Leu Arg Arg Leu Ala Val Pro His Phe Ser Asn Pro Lys
 85 90 95
 Val His Gly Ser Ile Pro Phe Pro Ser Phe Leu Pro Val Pro Val Ser
 100 105 110
 Gly Phe Gly Asn Arg Phe Pro Leu Cys Ser Pro Arg Val Gln
 115 120 125

 <210> 2213
 <211> 327

<212> DNA

<213> Homo sapiens

<400> 2213

acgcgtccga cggcagttc cggcagctgc gggaaagctg cgaatgcgtc gccgagcatt
 60
 gccggtgctt cgacacactg gggtatatcg cctctaaagc acaggtctac gaaggttctg
 120
 acggaaggcc cggccaatcc gatcgcgccg tcggcgctgc gcatcatccg ggcgcgcgtg
 180
 tcgcagctct ggggcacgtc gctgctccgc aacggacggg cggaacagag tgtggtggag
 240
 atcgccccgt tggtcgacgc gatcacgtca cgggacgagg aagccgccca gcgtgcactg
 300
 ctgcaccaca atcgacgcgc gttggaa
 327

<210> 2214

<211> 95

<212> PRT

<213> Homo sapiens

<400> 2214

Met Arg Ser Pro Ser Ile Ala Gly Ala Ser Thr His Trp Val Ile Ser
 1 5 10 15
 Pro Ser Lys His Arg Ser Thr Lys Val Leu Thr Glu Gly Pro Ala Asn
 20 25 30
 Pro Ile Ala Ala Ser Ala Leu Arg Ile Ile Arg Ala Arg Val Ser Gln
 35 40 45
 Leu Trp Gly Thr Ser Leu Leu Arg Asn Gly Arg Ala Glu Gln Ser Val
 50 55 60
 Val Glu Ile Ala Arg Leu Val Asp Ala Ile Thr Ser Arg Asp Glu Glu
 65 70 75 80
 Ala Ala Gln Arg Ala Leu Leu Asp His Asn Arg Ser Ala Leu Glu
 85 90 95

<210> 2215

<211> 430

<212> DNA

<213> Homo sapiens

<400> 2215

ctggggatca tgccctacat cactgcgtcg atcatcctgc agctgctgac agtgcgtgac
 60
 ccgaagctgg aaacccttaa gaaggaggcg gcgtccggtc agaacaagat caccagctac
 120
 acccgttacc tcactctcgt gcttgccctg ttgcaggcaa cggccttcgt cacgcttgcc
 180
 acctccggcc gtctattcac cnmtgcagct ntgcagctcg tctactccac ctgcgtcttc
 240
 gaagtcgtcg tcatgatcct gactatgacg gccggtacga ccatcgctcat gtggatgggt
 300
 gagctcatca ccgaccgagg tatcggcaac ggtatgtcga tcatgatttt cactcagatt
 360

gcggcgcggtt tccctgactc gctgtgggtct atcaagggtcg ctcgaaatgg cgccgggtcag
420

gctcacgcgt
430

<210> 2216

<211> 143

<212> PRT

<213> Homo sapiens

<400> 2216

Leu	Gly	Ile	Met	Pro	Tyr	Ile	Thr	Ala	Ser	Ile	Ile	Leu	Gln	Leu	Leu
1			5						10				15		
Thr	Val	Val	Ile	Pro	Lys	Leu	Glu	Thr	Leu	Lys	Lys	Glu	Gly	Ala	Ser
			20					25					30		
Gly	Gln	Asn	Lys	Ile	Thr	Gln	Tyr	Thr	Arg	Tyr	Leu	Thr	Leu	Val	Leu
			35				40					45			
Gly	Leu	Leu	Gln	Ala	Thr	Ala	Phe	Val	Thr	Leu	Ala	Thr	Ser	Gly	Arg
	50				55					60					
Leu	Phe	Thr	Xaa	Ala	Ala	Xaa	Pro	Val	Val	Tyr	Ser	Thr	Ser	Val	Phe
65					70					75				80	
Glu	Val	Val	Val	Met	Ile	Leu	Thr	Met	Thr	Ala	Gly	Thr	Thr	Ile	Val
				85					90				95		
Met	Trp	Met	Gly	Glu	Leu	Ile	Thr	Asp	Arg	Gly	Ile	Gly	Asn	Gly	Met
			100					105					110		
Ser	Ile	Met	Ile	Phe	Thr	Gln	Ile	Ala	Ala	Arg	Phe	Pro	Asp	Ser	Leu
			115					120					125		
Trp	Ser	Ile	Lys	Val	Ala	Arg	Asn	Gly	Ala	Gly	Gln	Ala	His	Ala	
	130					135						140			

<210> 2217

<211> 444

<212> DNA

<213> Homo sapiens

<400> 2217

accagggcgcg cttcgaagga cctctctcca gctatcgtga cgacgacggc gaagcgggct
60
atgacgtggc tcgatgacga cgtgggcgcc gacctgttga atcaggctga ttccatggac
120
catgccctgg aggccaccgt ccagggtcgg gtcaccacgc cggacgcccc agtcatccag
180
acctgtgcgc tggtgcgtga ccttgctcgc gtggcagtcg gccagctggg ccgaaatgac
240
gaggactcta gggaaccagt cgaatgcggag agagtacagg ctcaagcgnc gatgcgggag
300
gttttcgaga ccgccgaacg catgggtggg ctggccgcgc ccgacgtggt gtgggtctct
360
gagttctgaga agggataccg cagcattcac gtcgctccgc tgagtgttgg cggcttgcta
420
cgagagaatg tctttgctca gtcc
444

<210> 2218

<211> 148

<212> PRT

<213> Homo sapiens

<400> 2218

```

Thr Arg Ala Ala Ser Lys Asp Leu Ser Pro Ala Ile Val Thr Thr Thr
 1           5           10           15
Ala Lys Arg Ala Met Thr Trp Leu Asp Asp Val Gly Ala Asp Leu
      20           25           30
Leu Asn Gln Ala Asp Ser Met Asp His Ala Leu Glu Ala Thr Val Pro
 35           40           45
Gly Arg Val Thr Thr Pro Asp Ala Gln Val Ile Gln Thr Cys Ala Val
 50           55           60
Leu Arg Asp Leu Ala Arg Val Ala Val Ser Gln Leu Gly Arg Asn Asp
 65           70           75           80
Glu Asp Ser Arg Glu Pro Val Asp Ala Glu Arg Val Gln Ala Gln Ala
      85           90           95
Xaa Met Arg Glu Val Phe Glu Thr Ala Glu Arg Met Val Gly Leu Ala
      100           105           110
Ala Ala Asp Val Val Trp Val Ser Glu Ser Glu Lys Gly Tyr Arg Ser
      115           120           125
Ile His Val Ala Pro Leu Ser Val Gly Gly Leu Leu Arg Glu Asn Val
      130           135           140
Phe Ala Gln Ser
145

```

<210> 2219

<211> 688

<212> DNA

<213> Homo sapiens

<400> 2219

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acgcgtaccg tcggtggcat gagcgtcctg ccactggaaa ttgggtgtgc attcagctac
 60
ggcattacga atatggcgtg gatgtggcta tggttcgacg agcccggaag ccgttgggag
 120
tggtcgatcc ttttccccgc tgggtggctg accagcgctt tggtcagtca ggggttcggt
 180
ggaatgttcc atagtgtgca gattgcgcgt catgtcagca gttaccacgg catcatggtc
 240
gcttttcgcg tcggtgggta cggatggctt cgcgatgcaca acttcgctca cctgatgatg
 300
cgctattcga ttcgctcggc cttgataatc ggcatcgcca tccagttcac ctggggaggca
 360
gtgctgatga tctcgggtat caggccgttg acatggcgcc cgcttggtaa cgattctctc
 420
atcgagacga atctcggcgc tccgttcatt ttgctcattg tgaaagcttg gcgcgcgcga
 480
cccgaaaggaa ttcctggctc taccagtcgg cgcccgaccg cccgtggcac agcgcgagtc
 540
tatatgaggg atgatcttgt ttctcgacgc cttctacagc gtccttgaga gcctctgcga
 600
gcgaaggggc cggtgtagg tctccccggg gctcgttgtg gtccctctc tgctgtacgc
 660

```


agagccgtgt gatgaggcga agtcatga
688

<210> 2220

<211> 189

<212> PRT

<213> Homo sapiens

<400> 2220

```
Met Ser Val Leu Pro Leu Glu Ile Trp Leu Ser Phe Ser Tyr Gly Ile
 1           5           10          15
Thr Asn Met Ala Trp Met Trp Leu Trp Phe Asp Glu Pro Gly Asn Arg
      20           25           30
Trp Glu Trp Ser Ile Leu Phe Pro Ala Gly Trp Leu Thr Ser Ala Leu
      35           40           45
Val Ser Gln Gly Phe Gly Gly Met Phe His Ser Val Gln Ile Ala Arg
 50           55           60
His Val Ser Ser Tyr His Gly Ile Met Val Ala Phe Ala Leu Val Gly
 65           70           75           80
Tyr Gly Trp Leu Ala Met His Asn Leu Arg His Pro Asp Glu Arg Tyr
      85           90           95
Ser Ile Arg Ser Ala Leu Ile Ile Gly Ile Gly Ile Gln Phe Thr Trp
      100          105          110
Glu Ala Val Leu Met Ile Ser Gly Ile Arg Pro Leu Thr Trp Arg Pro
      115          120          125
Leu Val Ile Asp Ser Leu Ile Glu Thr Asn Leu Gly Ala Pro Phe Met
      130          135          140
Leu Leu Ile Val Lys Ala Trp Arg Ala Pro Pro Glu Gly Ile Pro Gly
 145          150          155          160
Ser Thr Ser Pro Arg Pro Thr Ala Arg Gly Thr Ala Arg Val Tyr Met
      165          170          175
Arg Asp Asp Leu Val Ser Arg Arg Leu Leu Gln Arg Pro
      180          185
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<210> 2221

<211> 530

<212> DNA

<213> Homo sapiens

<400> 2221

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actagtgtag ctgcaatata tactcgggat ttactacagt taagccttat ccttccaccc
 60
aaagaagagc aaaccgccat cgctaacgct ctttccgaca tggacaccga actcgagcgc
 120
ctacaacaac gcctcagtaa aacaaaaacc atcaagcaag gcgatgatgca agaactactc
 180
acaggggaaaa cgaggttggt atgagccaca aggtgaattt agtgcgatgag ctggataaagc
 240
gtattatctc ggtaaatacg ttattgtcac agcctgagct tgctattccg gcttatcagc
 300
ggccttataa atggtcacia gagaacctaa atgcgctgat gagtgtattt cgaatttatc
 360
gtaacaaatc ggcttatcgg ctggggacgg tgggtttttc ttatcataat gaaccgtag
 420
```

acaacgagaa taccacaaag ctggatattg tagacgggtca gcaacgtacc ttaaccttgt
 480
 tgctgctagt caaagccatt ttagaagaac ggttgctctgc gttacgcgt
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<210> 2222
 <211> 67
 <212> PRT
 <213> Homo sapiens

<400> 2222
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 Ile Leu Pro Pro Lys Glu Glu Gln Thr Ala Ile Ala Asn Val Leu Ser
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 Asp Met Asp Thr Glu Leu Asp Ala Leu Gln Gln Arg Leu Ser Lys Thr
 35 40 45
 Lys Thr Ile Lys Gln Gly Met Met Gln Glu Leu Leu Thr Gly Lys Thr
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 Arg Leu Val
 65

<210> 2223
 <211> 482
 <212> DNA
 <213> Homo sapiens

<400> 2223
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 tgcattttatc caacggcccg gacagggccg gcagttcaca gtccagtttg taaagcgctg
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 240
 tcaggccgctc gagcaccaca aggatgacgt tgtgcttcat aagggggagac gtcgcccaac
 300
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 360
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 480
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<210> 2224
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 2224
 Met Ser Gln Ala Tyr Arg Cys Gly Ala Ser Pro Leu Met Lys His Asn

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      20             25             30
Ala Met Gly His Leu Gln Ala Tyr Ile Ser Ala Gly Arg Ala Ala Leu
      35             40             45
Tyr Lys Leu Asp Cys Glu Leu Pro Ala Leu Ser Arg Pro Leu Asp Lys
      50             55             60
Cys Ile Phe Thr Gly Val Pro Pro Ile Asp Ser Gly Ile Val His Asn
      65             70             75             80
Asn Val Ser Arg Leu Ser Asn Gln Arg Ser Ile Phe His Tyr Ala Thr
      85             90             95
Asp Ala Gly Leu Thr Thr Ala Ala Ala
      100             105

```

<210> 2225

<211> 753

<212> DNA

<213> Homo sapiens

<400> 2225

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cgattcactg aggtgtccgc cgtgtccgag acgttcatcc gtcagcgctc caagccactc
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aaggagggca tcggccacac aggttgggtc gtctcggacg agctcggggc ggtgggcaac
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420
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480
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gcctcagcgg aggtcaacga tgcgatcggt gcctcctgcg ggggaccatg cctggcatga
660
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<210> 2226

<211> 219

<212> PRT

<213> Homo sapiens

<400> 2226

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Xaa Ala Ser Asp Pro His Gly Pro Leu Thr Trp Arg Tyr Asp Arg Glu

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Arg Ala Gly Ala Gly Val Ile Leu Asp Leu Met Gly His Gly Glu Asp
      20
Leu Val Gln Tyr Leu Leu Lys Gly Arg Phe Thr Glu Val Ser Ala Val
      35           40           45
Ser Glu Thr Phe Ile Arg Gln Arg Pro Lys Pro Leu Lys Glu Gly Ile
      50           55           60
Gly His Thr Gly Trp Val Val Ser Asp Glu Leu Gly Pro Val Gly Asn
      65           70           75           80
Glu Asp Tyr Cys Ala Val Ile Ala Arg Met Glu Asn Gly Val Met Cys
      85           90           95
Thr Leu Glu Ser Ser Arg Val Ser Val Gly Pro Arg Ala Glu Tyr Ile
      100           105           110
Val Glu Ile Tyr Gly Thr Asp Gly Ser Ile Arg Trp Asn Phe Glu Asp
      115           120           125
Leu Asn His Leu Gln Val Cys Leu Gly Arg Asn Asn Arg Ala Leu Gln
      130           135           140
Gly Tyr Val Asn Cys Met Ala Gly Pro Asp Phe Pro Glu Phe Met Arg
      145           150           155           160
Phe Gln Pro Gly Ala Gly Thr Ser Met Gly Phe Asp Asp Met Lys Val
      165           170           175
Val Glu Ala Ala Lys Phe Val Arg Gly Val Leu Asp Gly Gln Gln Tyr
      180           185           190
Gly Pro Ser Val Ala Asp Gly Trp Ala Ser Ala Glu Val Asn Asp Ala
      195           200           205
Ile Val Ala Ser Cys Gly Gly Pro Cys Leu Ala
      210           215

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<210> 2227

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2227

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120
gactttgtac gaacgcttcg tactcaccag gcactgtggt gtaaatcccc ggtaaaagcca
180
ggaattccat ataagcagtt gacagttggg gtccccaagg agattttcca aaacgagaag
240
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324

```

<210> 2228

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2228

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Met Ala His Leu Leu Lys Thr Val Val Ala Gly Cys Ser Cys Pro Phe

```

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      1             5             10             15
Leu Ser Asn Leu Gly Ser Ser Lys Val Leu Pro Gly Lys Arg Asp Phe
      20             25             30
Val Arg Thr Leu Arg Thr His Gln Ala Leu Trp Cys Lys Ser Pro Val
      35             40             45
Lys Pro Gly Ile Pro Tyr Lys Gln Leu Thr Val Gly Val Pro Lys Glu
      50             55             60
Ile Phe Gln Asn Glu Lys Arg Val Ala Leu Ser Pro Ala Gly Val Gln
      65             70             75             80
Ala Leu Val Lys Gln Gly Phe Asn Val Val Val Glu Ser Gly Ala Gly
      85             90             95
Glu Ala

```

<210> 2229

<211> 320

<212> DNA

<213> Homo sapiens

<400> 2229

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cccacagaga gggaacgggc ggggggaggg gagagagaaa gacagactca ggcagaacct
120
tagctcagcc ccttctctgc tgccctggccc tgggaggatg ccatccccag tccctcttc
180
tgggccctgc tctggggact cggcacagat ggaaccagt catcctcagc cccctgagaa
240
gctgtgctgc catcagctcc ttctctgggt acagggcacg ggaagcggct gccacgagg
300
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320

```

<210> 2230

<211> 94

<212> PRT

<213> Homo sapiens

<400> 2230

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Met Gly Gly Pro Asp Gly Glu Ala His Arg Glu Gly Thr Gly Gly Gly
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Arg Gly Gly Glu Lys Thr Asp Ser Gly Arg Thr Leu Ala Gln Pro Leu
      20             25             30
Pro Ala Cys Leu Ala Leu Gly Gly Cys His Pro Gln Ser Pro Leu Leu
      35             40             45
Gly Pro Ala Leu Gly Thr Arg His Arg Trp Ile Gln Cys Ile Leu Ser
      50             55             60
Pro Leu Arg Ser Cys Ala Ala Ile Ser Ser Phe Ser Gly Tyr Arg Ala
      65             70             75             80
Arg Glu Ala Ala Ala Gln Gln Ala Ser Val Pro Pro Ser Cys
      85             90

```

<210> 2231

<211> 671

<212> DNA

<213> Homo sapiens

<400> 2231

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tccttcaacc aaaaaatgag gagagtgcag gacctcagag gcttactgtg aggatggaga
120
aaagcccagt tcaatgcccc actgggaaat gcttccatt aattgtggaa ttgtctgtcc
180
catttactgt cggggtgaca ggggggttgg gggtcagagt agagacagga gaagggaagt
240
agcatttgtg ggataccacc cactgtccag ggactgaacc ctatctggat ctctgcagc
300
cctcccaatg gcaactgtgaa gccagtgttg tttacagat gaggaaactg agatttgtgg
360
ctataacaga taaacagatg accctgaatg gggcaggtca tgtcatctgc catagataca
420
tgcatagaac aatgcaaacc agtcagtcct ctctgagtca gaccaggctg accatcaggg
480
acatgcagac actggcaggg ctggggttgt tcccatcgg tgatagcctg gtgccccat
540
ggccccctgat gcccacggct gtctggaagg ctgggtcact gctgagaaga caaggagaca
600
ttttctctca ccagctttct tttttctatt cttcttaga cacctgagct gcggtgatca
660
cagctcttaa g
671

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<210> 2232

<211> 177

<212> PRT

<213> Homo sapiens

<400> 2232

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Met Glu Lys Ser Pro Val Gln Cys Pro Thr Gly Lys Cys Phe Pro Leu
1      5      10      15
Ile Val Glu Leu Ser Cys Pro Phe Thr Val Gly Val Thr Gly Gly Val
20     25     30
Gly Val Arg Val Glu Thr Gly Glu Gly Ser Glu His Leu Trp Asp Thr
35     40     45
His His Val Pro Gly Thr Glu Pro Tyr Leu Asp Leu Leu Gln Pro Ser
50     55     60
Gln Trp His Cys Glu Ala Ser Val Val Leu Gln Met Arg Lys Leu Arg
65     70     75     80
Phe Val Ala Ile Thr Asp Lys Gln Met Thr Leu Asn Gly Ala Gly His
85     90     95
Val Ile Cys His Arg Tyr Met His Arg Thr Met Gln Thr Ser Gln Ser
100    105    110
Pro Leu Ser Gln Thr Arg Leu Thr Ile Arg Asp Met Gln Thr Leu Ala
115    120    125
Gly Leu Gly Leu Phe Pro Ile Gly Asp Ser Leu Val Pro Pro Trp Pro
130    135    140
Leu Met Pro Thr Ala Val Trp Lys Ala Gly Ser Leu Leu Arg Arg Gln

```

145	150	155	160
Gly Asp Ile Phe Ser His Gln Leu Ser Phe Phe Tyr Ser Phe Leu Asp			
	165	170	175
Thr			

<210> 2233

<211> 6199

<212> DNA

<213> Homo sapiens

<400> 2233

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120
agtgcacaaa gtgaagctga aaaggaaagg attatgggaa agatggaagc tgaccagag
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420
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480
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540
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1260

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<210> 2234
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 <212> PRT
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<400> 2234
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 Pro Lys Tyr Ala Gln Ala Gly Phe Glu Gly Phe Lys Thr Leu Asn Arg
 35 40 45
 Ile Gln Ser Lys Leu Tyr Arg Ala Ala Leu Glu Thr Asp Glu Asn Leu
 50 55 60
 Leu Leu Cys Ala Pro Thr Gly Ala Gly Lys Thr Asn Val Ala Leu Met
 65 70 75 80
 Cys Met Leu Arg Glu Ile Gly Lys His Ile Asn Met Asp Gly Thr Ile
 85 90 95
 Asn Val Asp Asp Phe Lys Ile Ile Tyr Ile Ala Pro Met Arg Ser Leu
 100 105 110
 Val Gln Glu Met Val Gly Ser Phe Gly Lys Arg Leu Ala Thr Tyr Gly
 115 120 125
 Ile Thr Val Ala Glu Leu Thr Gly Asp His Gln Leu Cys Lys Glu Glu
 130 135 140
 Ile Ser Ala Thr Gln Ile Ile Val Cys Thr Pro Glu Lys Trp Asp Ile
 145 150 155 160
 Ile Thr Arg Lys Gly Gly Glu Arg Thr Tyr Thr Gln Leu Val Arg Leu
 165 170 175
 Ile Val Leu Asp Glu Ile His Leu Leu His Asp Asp Arg Gly Pro Val
 180 185 190
 Leu Glu Ala Leu Val Ala Arg Ala Ile Arg Asn Ile Glu Met Thr Gln
 195 200 205
 Glu Asp Val Arg Leu Ile Gly Leu Ser Ala Thr Leu Pro Asn Tyr Glu
 210 215 220
 Asp Val Ala Thr Phe Leu Arg Val Asp Pro Ala Lys Gly Leu Phe Tyr
 225 230 235 240
 Phe Asp Asn Ser Phe Arg Pro Val Pro Leu Glu Gln Thr Tyr Val Gly
 245 250 255
 Ile Thr Glu Lys Lys Ala Ile Lys Arg Phe Gln Ile Met Asn Glu Ile
 260 265 270
 Val Tyr Glu Lys Ile Met Glu His Ala Gly Lys Asn Gln Val Leu Val
 275 280 285
 Phe Val His Ser Arg Lys Glu Thr Gly Lys Thr Ala Arg Ala Ile Arg
 290 295 300
 Asp Met Cys Leu Glu Lys Asp Thr Leu Gly Leu Phe Leu Arg Glu Gly
 305 310 315 320
 Ser Ala Ser Thr Glu Val Leu Arg Thr Glu Ala Glu Gln Cys Lys Asn
 325 330 335
 Leu Glu Leu Lys Asp Leu Leu Pro Tyr Gly Phe Ala Ile His His Ala

[illegible]

770		775		780	
Ala Phe Trp Ile Leu Val Glu Asp Val Asp Ser Glu Val Ile Leu His					
785	790		795		800
His Glu Tyr Phe Leu Leu Lys Ala Lys Tyr Ala Gln Asp Glu His Leu					
	805		810		815
Ile Thr Phe Phe Val Pro Val Phe Glu Pro Leu Pro Pro Gln Tyr Phe					
	820		825		830
Ile Arg Val Val Ser Asp Arg Trp Leu Ser Cys Glu Thr Gln Leu Pro					
	835		840		845
Val Ser Phe Arg His Leu Ile Leu Pro Glu Lys Tyr Pro Pro Pro Thr					
	850		855		860
Glu Leu Leu Asp Leu Gln Pro Leu Pro Val Ser Ala Leu Arg Asn Ser					
	865		870		875
Ala Phe Glu Ser Leu Tyr Gln Asp Lys Phe Pro Phe Phe Asn Pro Ile					
	885		890		895
Gln Thr Gln Val Phe Asn Thr Val Tyr Asn Ser Asp Asp Asn Val Phe					
	900		905		910
Val Gly Ala Pro Thr Gly Ser Gly Lys Thr Ile Cys Ala Glu Phe Ala					
	915		920		925
Ile Leu Arg Met Leu Leu Gln Ser Ser Glu Gly Arg Cys Val Tyr Ile					
	930		935		940
Thr Pro Met Glu Ala Leu Ala Glu Gln Val Tyr Met Asp Trp Tyr Glu					
	945		950		955
Lys Phe Gln Asp Arg Leu Asn Lys Lys Val Val Leu Leu Thr Gly Glu					
	965		970		975
Thr Ser Thr Asp Leu Lys Leu Leu Gly Lys Gly Asn Ile Ile Ser					
	980		985		990
Thr Pro Glu Lys Trp Asp Ile Leu Ser Arg Arg Trp Lys Gln Arg Lys					
	995		1000		1005
Asn Val Gln Asn Ile Asn Leu Phe Val Val Asp Glu Val His Leu Ile					
	1010		1015		1020
Gly Gly Glu Asn Gly Pro Val Leu Glu Val Ile Cys Ser Arg Met Arg					
	1025		1030		1035
Tyr Ile Ser Ser Gln Ile Glu Arg Pro Ile Arg Ile Val Ala Leu Ser					
	1045		1050		1055
Ser Ser Leu Ser Asn Ala Lys Asp Val Ala His Trp Leu Gly Cys Ser					
	1060		1065		1070
Ala Thr Ser Thr Phe Asn Phe His Pro Asn Val Arg Pro Val Pro Leu					
	1075		1080		1085
Glu Leu His Ile Gln Gly Phe Asn Ile Ser His Thr Gln Thr Arg Leu					
	1090		1095		1100
Leu Ser Met Ala Lys Pro Val Tyr His Ala Ile Thr Lys His Ser Pro					
	1105		1110		1115
Lys Lys Pro Val Ile Val Phe Val Pro Ser Arg Lys Gln Thr Arg Leu					
	1125		1130		1135
Thr Ala Ile Asp Ile Leu Thr Thr Cys Ala Ala Asp Ile Gln Arg Gln					
	1140		1145		1150
Arg Phe Leu His Cys Thr Glu Lys Asp Leu Ile Pro Tyr Leu Glu Lys					
	1155		1160		1165
Leu Ser Asp Ser Thr Leu Lys Glu Thr Leu Leu Asn Gly Val Gly Tyr					
	1170		1175		1180
Leu His Glu Gly Leu Ser Pro Met Glu Arg Arg Leu Val Glu Gln Leu					
	1185		1190		1195
Phe Ser Ser Gly Ala Ile Gln Val Val Val Ala Ser Arg Ser Leu Cys					

	1205		1210		1215
Trp Gly Met Asn Val Ala Ala His Leu Val Ile Ile Met Asp Thr Gln	1220		1225		1230
Tyr Tyr Asn Gly Lys Ile His Ala Tyr Val Asp Tyr Pro Ile Tyr Asp	1235		1240		1245
Val Leu Gln Met Val Gly His Ala Asn Arg Pro Leu Gln Asp Asp Glu	1250		1255		1260
Gly Arg Cys Val Ile Met Cys Gln Gly Ser Lys Lys Asp Phe Phe Lys	1265		1270		1275
Lys Phe Leu Tyr Glu Pro Leu Pro Val Glu Ser His Leu Asp His Cys	1285		1290		1295
Met His Asp His Phe Asn Ala Glu Ile Val Thr Lys Thr Ile Glu Asn	1300		1305		1310
Lys Gln Asp Ala Val Asp Tyr Leu Thr Trp Thr Phe Leu Tyr Arg Arg	1315		1320		1325
Met Thr Gln Asn Pro Asn Tyr Tyr Asn Leu Gln Gly Ile Ser His Arg	1330		1335		1340
His Leu Ser Asp His Leu Ser Glu Leu Val Glu Gln Thr Leu Ser Asp	1345		1350		1355
Leu Glu Gln Ser Lys Cys Ile Ser Ile Glu Asp Glu Met Asp Val Ala	1365		1370		1375
Pro Leu Asn Leu Gly Met Ile Ala Ala Tyr Tyr Tyr Ile Asn Tyr Thr	1380		1385		1390
Thr Ile Glu Leu Phe Ser Met Ser Leu Asn Ala Lys Thr Lys Val Arg	1395		1400		1405
Gly Leu Ile Glu Ile Ile Ser Asn Ala Ala Glu Tyr Glu Asn Ile Pro	1410		1415		1420
Ile Arg His His Glu Asp Asn Leu Leu Arg Gln Leu Ala Gln Lys Val	1425		1430		1435
Pro His Lys Leu Asn Asn Pro Lys Phe Asn Asp Pro His Val Lys Thr	1445		1450		1455
Asn Leu Leu Leu Gln Ala His Leu Ser Arg Met Gln Leu Ser Ala Glu	1460		1465		1470
Leu Gln Ser Asp Thr Glu Glu Ile Leu Ser Lys Ala Ile Arg Leu Ile	1475		1480		1485
Gln Ala Cys Val Asp Val Leu Ser Ser Asn Gly Trp Leu Ser Pro Ala	1490		1495		1500
Leu Ala Ala Met Glu Leu Ala Gln Met Val Thr Gln Ala Met Trp Ser	1505		1510		1515
Lys Asp Ser Tyr Leu Lys Gln Leu Pro His Phe Thr Ser Glu His Ile	1525		1530		1535
Lys Arg Cys Thr Asp Lys Gly Val Glu Ser Val Phe Asp Ile Met Glu	1540		1545		1550
Met Glu Asp Glu Glu Arg Asn Ala Leu Leu Gln Leu Thr Asp Ser Gln	1555		1560		1565
Ile Ala Asp Val Ala Arg Phe Cys Asn Arg Tyr Pro Asn Ile Glu Leu	1570		1575		1580
Ser Tyr Glu Val Val Asp Lys Asp Ser Ile Arg Ser Gly Gly Pro Val	1585		1590		1595
Val Val Leu Val Gln Leu Glu Arg Glu Glu Glu Val Thr Gly Pro Val	1605		1610		1615
Ile Ala Pro Leu Phe Pro Gln Lys Arg Glu Glu Gly Trp Trp Val Val	1620		1625		1630
Ile Gly Asp Ala Lys Ser Asn Ser Leu Ile Ser Ile Lys Arg Leu Thr					

```

1635          1640          1645
Leu Gln Gln Lys Ala Lys Val Lys Leu Asp Phe Val Ala Pro Ala Thr
1650          1655          1660
Gly Ala His Asn Tyr Thr Leu Tyr Phe Met Ser Asp Ala Tyr Met Gly
1665          1670          1675          1680
Cys Asp Gln Glu Tyr Lys Phe Ser Val Asp Val Lys Glu Ala Glu Thr
1685          1690          1695
Asp Ser Asp Ser Asp
1700

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<210> 2235
<211> 586
<212> DNA
<213> Homo sapiens

```

```

<400> 2235
tctagaatga gtatgaggac actctcacca gaggtaggtg aagggtgata cagctggcac
60
tcagtgcttg cacattctcc actggcagaa tgactcccga cgtggctcgg gctccccgga
120
agacacccct cgaagcagtg gtgcctctag catcttcgac ctgaggaacc tggcagctga
180
ctcattgttg ccctctctgc tagagcgggc ggccccagaa gatgtggacc ggcgaatga
240
agcccttoga cggcagcacc ggccccgggc cctgettccc ctctaccggg cacctgacga
300
ggatgaagcc ggggaacgct gtgacgcctc agagccaccc ccgcgagcac ttgggacaaa
360
ggatcttggt caagtgtctg tcgctcaagt tcgagattga aattgagccc atctttggga
420
tcttggtctc gtatgatgtg cggaagaaaa agaagatctc ggaaaaattc tacttcgacc
480
tgaactcgga ctccatgaag gggctgcttc gggctcatgg caccaccctc gccatctcca
540
ccctggcccg ctctgccatc ttctctgtga cctacccttc acgcgt
586

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```

<210> 2236
<211> 123
<212> PRT
<213> Homo sapiens

```

```

<400> 2236
Met Ser Pro Lys Gln Pro Leu His Gly Val Arg Val Gln Val Glu Val
1          5          10          15
Glu Val Phe Arg Asp Leu Leu Phe Leu Pro His Ile Ile Gln Ser Gln
20          25          30
Asp Pro Lys Asp Gly Leu Asn Phe Asn Leu Glu Leu Glu Arg Gln Thr
35          40          45
Leu Asp Gln Asp Pro Leu Ser Lys Val Leu Ala Gly Val Ala Leu Gly
50          55          60
Gly Tyr Ser Val Pro Arg Leu His Pro Arg Gln Val Pro Gly Arg Gly
65          70          75          80
Glu Ala Gly Pro Gly Ala Gly Ala Ala Val Glu Gly Leu His Cys Ala

```

```

      85              90              95
Gly Pro His Leu Leu Gly Pro Pro Ala Leu Ala Glu Arg Ala Thr Met
      100              105              110
Ser Gln Leu Pro Gly Ser Ser Gly Arg Arg Cys
      115              120

```

<210> 2237
 <211> 421
 <212> DNA
 <213> Homo sapiens

```

<400> 2237
cttaggaagg cacacctgtg tcccactgca gccaaagagga agcaccctctt
60
tggggcgagc gagtgctggc cagcttgggg atagtccctg gaagtgtctg ggagcactga
120
gggaggagct gaggtccaag cctctctcca gtgcatcacc ctggtcaggga gtggggcagt
180
gtggagccag gggctcttca gccagcacct gctgcactat gggctccagc tgtgcaagac
240
caccctgtgag aaggagtctt gttgggagca ggggtgggaa gcaactgtggg agaggtgtcc
300
ttgggtctcgg tagcagggac cttgatgtat cttgaagcca gggggccgac tgaggcgctt
360
gtctgaaggc ctccatgaga gggagggggc tggagggggc tgttccaat aatagctcta
420
t
421

```

<210> 2238
 <211> 124
 <212> PRT
 <213> Homo sapiens

```

<400> 2238
Met Glu Ala Phe Arg Gln Ala Pro Gln Ser Ala Pro Trp Leu Gln Asp
1      5      10      15
Thr Ser Arg Ser Leu Leu Pro Glu Pro Arg Thr Pro Leu Pro Gln Cys
      20      25      30
Phe Pro Thr Leu Leu Pro Thr Arg Leu Leu Thr Gly Gly Leu Ala
      35      40      45
Gln Leu Glu Pro Ile Val Gln Gln Val Leu Ala Glu Glu Pro Leu Ala
      50      55      60
Pro His Cys Pro Thr Pro Asp Gln Gly Asp Ala Leu Glu Glu Gly Leu
      65      70      75      80
Asp Leu Ser Ser Ser Leu Ser Ala Pro Asp His Phe Gln Gly Leu Ser
      85      90      95
Pro Ser Trp Pro Ala Leu Leu Arg Pro Lys Arg Ser Val Trp Gly Ala
      100     105     110
Ser Ser Trp Leu Gln Trp Asp Thr Gly Val Pro Ser
      115     120

```

<210> 2239
 <211> 623

<212> DNA

<213> Homo sapiens

<400> 2239

gctagcagga ctcagaaatc tgctgttgag cacaaagcca aaaaatctct gtcccatcct
 60
 agccattcca ggccctgggccc catgggcacc ccacacaata aggctaagag tccagggtgc
 120
 aggcagccag gcagcagctc tagctcagcc cctgggcagc ccagcacagg ggttgctcga
 180
 cccacagtta gttctggccc tgtgcctagg cgccagaatg gcagctccag ctcaggacct
 240
 gagcgatcaa tcagtgggtc caagaagcca accaatgact caaatccctc taggcggaca
 300
 gtcagtggta catgtggccc tggacaacct gcaagcagct cagggtggccc tgggcgaccc
 360
 atcagtgggt cagttagttc tgcaagaccc ttgggcagct ctcgtggccc tggccggcct
 420
 gtgagcagtc cacatgaact tcgacgacca gtgagtggct tgggcccccc gggcggtct
 480
 gtcagtggcc ctgggagatc cataagtggc ccaattccag ctggacggac tgtcagtaat
 540
 tcagtcaccg gaagaccagt gagcagcttg ggacctgggc aaacagttag tagctcaggt
 600
 cccactataa agcctaagtg cac
 623

<210> 2240

<211> 207

<212> PRT

<213> Homo sapiens

<400> 2240

Ala	Ser	Arg	Thr	Gln	Lys	Ser	Ala	Val	Glu	His	Lys	Ala	Lys	Lys	Ser
1				5					10					15	
Leu	Ser	His	Pro	Ser	His	Ser	Arg	Pro	Gly	Pro	Met	Val	Thr	Pro	His
			20					25					30		
Asn	Lys	Ala	Lys	Ser	Pro	Gly	Val	Arg	Gln	Pro	Gly	Ser	Ser	Ser	Ser
		35				40					45				
Ser	Ala	Pro	Gly	Gln	Pro	Ser	Thr	Gly	Val	Ala	Arg	Pro	Thr	Val	Ser
	50				55					60					
Ser	Gly	Pro	Val	Pro	Arg	Gln	Asn	Gly	Ser	Ser	Ser	Ser	Gly	Pro	
65				70				75						80	
Glu	Arg	Ser	Ile	Ser	Gly	Ser	Lys	Lys	Pro	Thr	Asn	Asp	Ser	Asn	Pro
			85					90					95		
Ser	Arg	Arg	Thr	Val	Ser	Gly	Thr	Cys	Gly	Pro	Gly	Gln	Pro	Ala	Ser
			100				105						110		
Ser	Ser	Gly	Gly	Pro	Gly	Arg	Pro	Ile	Ser	Gly	Ser	Val	Ser	Ser	Ala
		115				120					125				
Arg	Pro	Leu	Gly	Ser	Ser	Arg	Gly	Pro	Gly	Arg	Pro	Val	Ser	Ser	Pro
	130				135						140				
His	Glu	Leu	Arg	Arg	Pro	Val	Ser	Gly	Leu	Gly	Pro	Pro	Gly	Arg	Ser
145				150					155					160	
Val	Ser	Gly	Pro	Gly	Arg	Ser	Ile	Ser	Gly	Pro	Ile	Pro	Ala	Gly	Arg


```

          100              105              110
Gly Leu Val Val Gly Pro Lys Gly Ala Thr Ile Lys Arg Ile Gln Gln
   115              120              125
Gln Thr Asn Thr Tyr Ile Ile Thr Pro Ser Arg Asp Arg Asp Pro Val
   130              135              140
Phe Glu Ile Thr Gly Ala Pro Gly Asn Val Glu Arg Ala Arg Glu Glu
   145              150              155              160
Ile Glu Thr His Ile Ala Val Arg Thr Gly Lys Ile Leu Glu Tyr Asn
   165              170              175
Asn Glu Asn Asp Phe Leu Ala Gly Ser Pro Asp Ala Ala Ile Asp Ser
   180              185              190
Arg Tyr Ser Asp Ala Trp Arg Val His Gln Pro Gly Cys Lys Pro Leu
   195              200              205
Ser Thr Phe Arg Gln Asn Ser Leu Gly Cys
   210              215

```

<210> 2243

<211> 384

<212> DNA

<213> Homo sapiens

<400> 2243

```

gaattcagca tttaaattgct actcgttggtc atgcaatttg ctgtcatgaa aacgactgtg
60
gatttcatttc ctggttaagaa tcttctgact tattgagctg catgtcagaa gcaaaagca
120
aaaaaaccaa atatgtacat aaacagtggt tatcattcct taaaagagaa ggaaaataaa
180
tccctaaata atgtggactg gaacacagaa atccaaggct ggccgcacgg gtcctggctg
240
ggatggcattc cggggagctg ctgctgggga cgtgcttgcc ggcacaggtc agggggagccg
300
ggttctgcct cctccttgcc caetctcttt gcgcctctcc tgtgctgcgc tgtcttgttt
360
tacctcccat cctgggcct tgga
384

```

<210> 2244

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2244

```

Met Gly Gly Lys Thr Arg Gln Ala Ser Thr Gly Arg Ala Gln Arg Glu
   1           5           10           15
Trp Ala Arg Arg Arg Gln Asn Pro Ala Pro Leu Thr Cys Ala Gly Lys
   20           25           30
His Val Pro Ser Ser Ser Pro Asp Ala Ile Pro Ala Arg Thr Arg
   35           40           45
Ala Ala Ser Leu Gly Phe Leu Cys Ser Ser Pro His Tyr Leu Gly Ile
   50           55           60
Tyr Phe Pro Ser Leu Leu Arg Asn Asp Asn Thr Val Leu Cys Thr Tyr
   65           70           75           80
Leu Val Phe Leu Leu Phe Ala Ser Asp Met Gln Leu Asn Lys Ser Glu

```

85 90 95
 Asp Ser Tyr Gln Glu Met Asn Pro Gln Ser Phe Ser
 100 105

<210> 2245
 <211> 632
 <212> DNA
 <213> Homo sapiens

<400> 2245
 acgctgtcga ttaccgtcaa ggctggtgtg gtgagcgtg atctgcacga gcggacgtct
 60
 tcgagagaag aggtcggacg cgagaggctc aactatggtc acaccttggc ccacgtatt
 120
 gagggccaca agcatttcac gtggcgtcat ggcgaggctg acgcggtggg catggtgttt
 180
 gcggccgaac tgtgcaccg gtacctggga ctgtccgatg aggtcgttc gcgcacccgc
 240
 actatcctgt ctgagatcgg attgcctgtt acctgtgacg agattaagtg ggcagatctg
 300
 cgcaagacga tgaacgtgga caagaaaacc agggtagacc cgcagaccgg gcgtcaagtg
 360
 ttgcggtttg tcggtattca caaaccgggt caggtcgccca tgatcgtcga ccctgacgag
 420
 gccgctttag ccgagtgeta cgaccgggtg tccgcacggt aaaaacgttc ggaaatgaac
 480
 atgttggtgc gggtcagtcg gcattcaggc ctccgtgacg ccgtcgacc caagtgatgt
 540
 gacgattcgg gaaatatctt gttgggcact cttgagcctc gcctgattcc ccatacccca
 600
 cttaagttca gtatcgacgg catgaatccg ga
 632

<210> 2246
 <211> 153
 <212> PRT
 <213> Homo sapiens

<400> 2246
 Thr Arg Ala Ile Thr Val Lys Ala Gly Val Val Ser Ala Asp Leu His
 1 5 10 15
 Glu Arg Thr Ser Ser Arg Glu Glu Val Gly Arg Glu Arg Leu Asn Tyr
 20 25 30
 Gly His Thr Leu Ala His Ala Ile Glu Ala His Lys His Phe Thr Trp
 35 40 45
 Arg His Gly Glu Ala Asp Ala Val Gly Met Val Phe Ala Ala Glu Leu
 50 55 60
 Ser His Arg Tyr Leu Gly Leu Ser Asp Glu Val Val Ala Arg Thr Arg
 65 70 75 80
 Thr Ile Leu Ser Glu Ile Gly Leu Pro Val Thr Cys Asp Glu Ile Lys
 85 90 95
 Trp Ala Asp Leu Arg Lys Thr Met Asn Val Asp Lys Lys Thr Arg Val
 100 105 110
 Asp Pro Gln Thr Gly Arg Gln Val Leu Arg Phe Val Gly Ile His Lys

```

          115              120              125
Pro Gly Gln Val Ala Met Ile Val Asp Pro Asp Glu Ala Ala Leu Ala
   130              135              140
Glu Cys Tyr Asp Arg Cys Ser Ala Arg
145              150

```

```

<210> 2247
<211> 324
<212> DNA
<213> Homo sapiens

```

```

<400> 2247
gggcgttcgc ctccagggtt ctccccgaca ctggatgccac acctgcccag gggcagaagg
60
gaggttgggc gtggggagtg cgggttacag tcagagtgtc caggacagtt tggagcagtg
120
cctcttaaat ttggcgcac agcacctggg agctttaaat agacccccac gccttgggcg
180
ccccaccgc tgacccccc gatctcagct ctgcctttcc cgctctctg ctgggttgca
240
taagccagcg attccaacc cggctgtac ctggaagcta cccaggagc ttctggagaa
300
tgtgccgtgt gagccatccc cctg
324

```

```

<210> 2248
<211> 105
<212> PRT
<213> Homo sapiens

```

```

<400> 2248
Met Ala His Thr Ala His Ser Pro Glu Ala Pro Gly Val Ala Ser Arg
   1           5           10           15
Tyr Ser Arg Gly Trp Glu Ser Leu Ala Tyr Ala Thr Gln Gln Arg Gly
   20           25           30
Gly Lys Gly Arg Ala Glu Ile Gly Trp Val Ser Gly Gly Gly Ala Gln
   35           40           45
Gly Val Gly Val Tyr Leu Lys Leu Pro Gly Ala Val Arg Pro Arg Leu
   50           55           60
Arg Gly Thr Ala Pro Asn Cys Pro Gly Asn Ser Asp Cys Thr Arg His
   65           70           75           80
Ser Pro Arg Pro Thr Ser Leu Leu Pro Leu Gly Arg Leu Ala Ser Ser
   85           90           95
Val Gly Glu Asn Pro Gly Gly Glu Arg
   100           105

```

```

<210> 2249
<211> 394
<212> DNA
<213> Homo sapiens

```

```

<400> 2249
gaaaaccgga taacagggtg tatacaagcc tctgagttct gggagcaaca accagctcaa
60

```

ccgcgaaggg aaagtgagaa agcaattaag ttgggaaccg cggggttttc ccattccac
 120
 ggtggaaacc gcgccagtg aattgaaatc cgttcctta aggcgaatg ggccttaaa
 180
 agggcaaggtc aaccgccgc cagtgtgatg gaatttgcaa gaattcggt tagcaccctc
 240
 ccggttttc tcccgaccgc gtgcagggtg ggtgcgctg ggctgggag gaactgggag
 300
 ctgggggctc atgtcctgta taaaggggct gcagggggcg tgtctcccc cagaagactg
 360
 gccacatggg gacaggcctc ctgggggcag atct
 394

<210> 2250

<211> 104

<212> PRT

<213> Homo sapiens

<400> 2250

Met	Ser	Pro	Gln	Leu	Pro	Val	Pro	Pro	Arg	Pro	Ser	Ala	Ala	His	Pro
1			5					10					15		
Ala	Arg	Gly	Arg	Glu	Lys	Ser	Arg	Glu	Gly	Ala	Lys	Pro	Asn	Ser	Cys
		20					25					30			
Lys	Phe	His	His	Thr	Gly	Gly	Arg	Leu	Thr	Leu	Pro	Phe	Lys	Gly	Pro
		35				40					45				
Phe	Arg	Leu	Lys	Glu	Ala	Asp	Phe	Asn	Ser	Leu	Ala	Ala	Val	Ser	Thr
	50					55				60					
Val	Gly	Met	Gly	Lys	Pro	Arg	Gly	Ser	Gln	Leu	Asn	Cys	Phe	Leu	Thr
	65			70					75				80		
Phe	Pro	Cys	Gly	Leu	Ser	Trp	Leu	Leu	Leu	Pro	Glu	Leu	Arg	Gly	Leu
			85					90					95		
Tyr	Thr	Pro	Cys	Tyr	Pro	Val	Phe								
			100												

<210> 2251

<211> 654

<212> DNA

<213> Homo sapiens

<400> 2251

acgcgtactt attcgccacc atgattatga ccagtgtttc cagtcggttc agttgttgca
 60
 gtggaatagt caggttaaat ttaattgtac cgtttatcgc aatctgccga ccactcgcca
 120
 ttcaatcatg acttcgtgat aaaagattga gtgtgaggtt ataacgccga agcggtaaaa
 180
 atttttaatt ttgccgctga ggggttgacc aagcgaagcg cggtagggtt tctgcttagg
 240
 agtttaatca tggttcagac ttttatttct cgccataatt caaacttttt tcttgataag
 300
 ctggttctca cttctgttac tccagcttct tcggcacctg ttttacagac acctaaagct
 360
 acatcgteaa cgttatatatt tgatagtttg acggttaattg ctggtaattg tggttttctt
 420

cattgcattc agatggatac atctgtcaac gccgctaate aggttgtttc tgttggtgct
 480
 gatattgctt ttgatgccga ccctaaattt ttgcctgtt tggttcgctt tgagctcttct
 540
 tcgggtccga ctaccctccc gactgcctat gatgtttatc ctttggatgg tcgccatgat
 600
 ggtggttatt ataccgtcaa ggactgtgtg actattgacg tccttctctg tacg
 654

<210> 2252

<211> 135

<212> PRT

<213> Homo sapiens

<400> 2252

Met	Phe	Gln	Thr	Phe	Ile	Ser	Arg	His	Asn	Ser	Asn	Phe	Phe	Ser	Asp
1				5					10					15	
Lys	Leu	Val	Leu	Thr	Ser	Val	Thr	Pro	Ala	Ser	Ser	Ala	Pro	Val	Leu
			20					25					30		
Gln	Thr	Pro	Lys	Ala	Thr	Ser	Ser	Thr	Leu	Tyr	Phe	Asp	Ser	Leu	Thr
			35					40				45			
Val	Asn	Ala	Gly	Asn	Gly	Gly	Phe	Leu	His	Cys	Ile	Gln	Met	Asp	Thr
	50				55					60					
Ser	Val	Asn	Ala	Ala	Asn	Gln	Val	Val	Ser	Val	Gly	Ala	Asp	Ile	Ala
65					70					75				80	
Phe	Asp	Ala	Asp	Pro	Lys	Phe	Phe	Ala	Cys	Leu	Val	Arg	Phe	Glu	Ser
				85					90					95	
Ser	Ser	Val	Pro	Thr	Thr	Leu	Pro	Thr	Ala	Tyr	Asp	Val	Tyr	Pro	Leu
			100					105					110		
Asp	Gly	Arg	His	Asp	Gly	Gly	Tyr	Tyr	Thr	Val	Lys	Asp	Cys	Val	Thr
	115						120					125			
Ile	Asp	Val	Leu	Pro	Arg	Thr									
	130					135									

<210> 2253

<211> 327

<212> DNA

<213> Homo sapiens

<400> 2253

ggatcctgct gggcctcttt tacgtgatgt tgaccagacc gctggtgcgc attattcgcg
 60
 cactgagcac cagcaagcag gcccgcttgg attgccacc gggtcacgaa aacgatgaaa
 120
 tcggcgtatt ggtcaacgtc gcccaaccagc aattcgacaa tatggaaaac gaaatcgagc
 180
 agcgccgccca cgccgaggac gcgctcaccg aatacctggg ccaactggaa gatatcgctt
 240
 ccgcacgcac cctggagctc aaggccagca accaacgctt gagccaatcc aacgatgagc
 300
 tggaagcggc aaagttgacc gccttggg
 327

<210> 2254

<211> 100
 <212> PRT
 <213> Homo sapiens

<400> 2254
 Met Leu Thr Gln Pro Leu Val Arg Ile Ile Arg Ala Leu Ser Thr Ser
 1 5 10 15
 Lys Gln Ala Arg Leu Asp Cys Pro Pro Gly His Glu Asn Asp Glu Ile
 20 25 30
 Gly Val Leu Val Asn Val Ala Asn Gln Gln Phe Asp Asn Met Glu Thr
 35 40 45
 Glu Ile Glu Gln Arg Arg His Ala Glu Asp Arg Leu Thr Glu Tyr Leu
 50 55 60
 Gly Gln Leu Glu Asp Ile Val Ser Ala Arg Thr Leu Glu Leu Lys Ala
 65 70 75 80
 Ser Asn Gln Arg Leu Ser Gln Ser Asn Asp Glu Leu Glu Ala Ala Lys
 85 90 95
 Leu Thr Ala Leu
 100

<210> 2255
 <211> 357
 <212> DNA
 <213> Homo sapiens

<400> 2255
 nngctagcac atgagaagtg tgaagtttat actttgcttg ggcgatcacg ccgtttttcca
 60
 aatatggctc atgcaacttc tggccaaagg ggtcacattg agcgtgctgc tatcaatgct
 120
 cctgtacagg gcagtgacgc tgatgtgtgct atgtgtgcaa tgccttgagat agacaggaat
 180
 actcgtctta aggagcttgg ttggacgcta ctcttgacagg tgcattgatga agtgatactg
 240
 gaagggccct cagagtctgc ggagtnggcc aagtcctatg ttgttgagtgc catgtctaag
 300
 cccttctatg gcaccaatat cctgagggtc gaccttgctg ttgatgccaa gtgtgca
 357

<210> 2256
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 2256
 Xaa Leu Ala His Glu Lys Cys Glu Val Tyr Thr Leu Leu Gly Arg Ser
 1 5 10 15
 Arg Arg Phe Pro Asn Met Ala His Ala Thr Ser Gly Gln Arg Gly His
 20 25 30
 Ile Glu Arg Ala Ala Ile Asn Ala Pro Val Gln Gly Ser Ala Ala Asp
 35 40 45
 Val Ala Met Cys Ala Met Leu Glu Ile Asp Arg Asn Thr Arg Leu Lys
 50 55 60
 Glu Leu Gly Trp Thr Leu Leu Leu Gln Val His Asp Glu Val Ile Leu


```

65              70              75              80
Glu Gly Pro Ser Glu Ser Ala Glu Xaa Ala Lys Ser Ile Val Val Glu
              85              90              95
Cys Met Ser Lys Pro Phe Tyr Gly Thr Asn Ile Leu Arg Val Asp Leu
              100              105              110
Ala Val Asp Ala Lys Cys Ala
              115

```

<210> 2257
 <211> 626
 <212> DNA
 <213> Homo sapiens

```

<400> 2257
nnaatgacaa aaaatatgaa ccaaaatagt gacagtggca gtacaaataa ctataaaagc
60
ctgaaaccta aattagaaaa tctgagttct ttaccaccag attctgacag aacatcagaa
120
gtatatctac atgaagaatt acagcaggac atgcaaaagt ttaagaatga ggtcaacaca
180
ttagaagaag agttcctggc tttgaagaaa gaaaatgttc aacttcataa agaggttgaa
240
gaagaaatgg agaagcacag aagtaaatagc acagaattat caggaaccct aactgatggt
300
actactgttg gcaatgatga tgatggacta aatcagcaga ttcttaggaa ggaaaatgaa
360
gagcatgaca ggcctgcaga taaaacagct aatgaaaga acaagggtcaa aaaccaataa
420
tatcctgagg ctgactttgc tgactcaatg gagccatctg aaatagcctc agaggattgt
480
gaattgtctc actctgttta tgagaatttt atgttgctga ttgaacaact tagaatggag
540
tataaaggta ggaccactgc ataaatgcaa ggccttttga tgmtctctgc agtaaatgtgt
600
gtatacattg ctgagaactg acgcgt
626

```

<210> 2258
 <211> 187
 <212> PRT
 <213> Homo sapiens

```

<400> 2258
Xaa Met Thr Lys Asn Met Asn Gln Asn Ser Asp Ser Gly Ser Thr Asn
1              5              10              15
Asn Tyr Lys Ser Leu Lys Pro Lys Leu Glu Asn Leu Ser Ser Leu Pro
20              25              30
Pro Asp Ser Asp Arg Thr Ser Glu Val Tyr Leu His Glu Glu Leu Gln
35              40              45
Gln Asp Met Gln Lys Phe Lys Asn Glu Val Asn Thr Leu Glu Glu Glu
50              55              60
Phe Leu Ala Leu Lys Lys Glu Asn Val Gln Leu His Lys Glu Val Glu
65              70              75              80
Glu Glu Met Glu Lys His Arg Ser Asn Ser Thr Glu Leu Ser Gly Thr

```


85										90					95				
Val	Val	Asp	Asp	Arg	Pro	Glu	Tyr	Val	Val	Pro	Glu	Phe	Phe	Asp	Glu				
100								105		110									
Arg	Val	Thr	Arg	Lys	Cys	Leu	Pro	Leu	Glu	Asn	Phe	Lys	Asn	Asp	Leu				
115				120				125											
Pro	Leu	Asp	Glu	Tyr	Asn	Gly	Phe	Ile	Ile	Val	Thr	Arg							
130			135					140											

```
<210> 2261
<211> 660
<212> DNA
<213> Homo sapiens
```

```

400> 2261
ngctagctgc tgcctctgag gatcggcgcc agaatatatgc tgcgcgatctg tccgggttgc
60
ttgagcccaa gcgcgaggtc gatgtgtccg gcgaccgcgc gcgttgcggt gggagcatag
120
tgctcggtgca cgctgaccga gaggtccgtg cggagagtac tcccgatgat atttgcgggc
180
agctcgtatgc cgtggccgcc atgatggccc ttgtctatgg gtgcgaatgtg actattcccg
240
acgatgccgg gaggtctctc gacaagcttc actgaacggt gttcaattgg tcccaacggc
300
tgcccattgtg ggcagccgct ctatctctgc atgggaagga acccgatgtc gtcacgcaat
360
ggtttccagg ccaccgacct ggetcttatt cgggtctttg cagccctcat tgctgtgcta
420
gcgcgtatcc cgcgatgtt catgggtggg cgggtccctt ttgcccttca gatggttgcc
480
gtcatctgtg cgcgatgtt gctgggaagt atccgtggcg gatgcgcggt aggcttgtat
540
atccttgtcg gcgcgctggg gctgcccgct ttcagcggtg ggtctagcgg gattggcgct
600
ctgggtgggt ccactgggtg gtatctatgg ggatggctga tcggcgcttt cgtggcgggg
660

```

```
<210> 2262
<211> 139
<212> PRT
<213> Homo sapiens
```

Met	Pro	Gly	Gly	Ser	Ser	Thr	Ser	Phe	Thr	Glu	Arg	Cys	Ser	Ile	Gly
1				5					10					15	
Pro	Asn	Gly	Cys	Pro	Cys	Gly	Gln	Pro	Leu	Tyr	Leu	Val	Met	Gly	Arg
			20					25					30		
Asn	Pro	Met	Ser	Ser	Arg	Asn	Gly	Phe	Gln	Ala	Thr	Asp	Leu	Ala	Leu
		35				40						45			
Ile	Ala	Val	Phe	Ala	Ala	Leu	Ile	Ala	Val	Leu	Ala	Val	Ile	Pro	Pro
	50					55				60					
Met	Phe	Met	Val	Gly	Ala	Val	Pro	Phe	Ala	Leu	Gln	Met	Val	Ala	Val
65					70					75					80
Met	Leu	Ala	Pro	Met	Val	Leu	Gly	Ser	Ile	Arg	Gly	Gly	Cys	Ala	Val

```

      85              90              95
Gly Leu Tyr Ile Leu Val Gly Ala Leu Gly Leu Pro Val Phe Ser Gly
      100              105              110
Gly Ser Ser Gly Ile Gly Val Leu Val Gly Pro Thr Gly Gly Tyr Leu
      115              120              125
Trp Gly Trp Leu Ile Gly Ala Phe Val Ala Gly
      130              135

```

<210> 2263

<211> 491

<212> DNA

<213> Homo sapiens

<400> 2263

```

nacgcgttcc cggtcgaccg aggcaaagcg aaaagtaagc aggggtgcccc tagtccccgt
60
tccaccgcgc gtatggctgc gtcactgctg acagatggcg tccccctgct gatctttccg
120
gagggcaccg ggtctcgac cggcgcaatg ggcaccttca aacctggggc tgccgcattg
180
gctatttcac gtgggggttcc gggtatcccc attgcttttag taggagcatg ggcgggctatg
240
ccgtccgagc aagccagggt accaaaagga cgtccattgg tccacgtggc tattggacac
300
cctatggacc ctgttccccg cgagatcgcc caccaattct ccgaacggat tcgtcgccacg
360
gtcattgagt tgcacgacca aaccgccccg gcctacggca tgccaaccct tgacgaatac
420
ggacgccacc gcgcgctaag ccaggcctcc gagagcgggc acaccgcac caccaaccac
480
tcgacgtgca c
491

```

<210> 2264

<211> 163

<212> PRT

<213> Homo sapiens

<400> 2264

```

Xaa Ala Phe Pro Val Asp Arg Gly Lys Gly Lys Ser Lys Gln Gly Ala
1      5      10      15
Arg Ser Pro Arg Ser His Arg Gly Met Ala Gly Ser Leu Leu Thr Asp
      20      25      30
Gly Val Pro Leu Leu Ile Phe Pro Glu Gly Thr Arg Ser Arg Thr Gly
      35      40      45
Ala Met Gly Thr Phe Lys Pro Gly Ala Ala Ala Leu Ala Ile Ser Arg
      50      55      60
Gly Val Pro Val Ile Pro Ile Ala Leu Val Gly Ala Trp Ala Ala Met
65      70      75      80
Pro Ser Glu Gln Ala Arg Leu Pro Lys Gly Arg Pro Leu Val His Val
      85      90      95
Ala Ile Gly His Pro Met Asp Pro Val Pro Gly Glu Ile Ala His Gln
      100      105      110
Phe Ser Glu Arg Ile Arg Arg Gln Val Ile Glu Leu His Asp Gln Thr

```

```

      115              120              125
Ala Arg Ala Tyr Gly Met Pro Thr Leu Asp Glu Tyr Gly Arg His Arg
      130              135              140
Ala Leu Ser Gln Ala Ser Glu Ser Gly Asp Thr Ala Ser Thr Asn His
      145              150              155              160
Ser Thr Cys

```

```

<210> 2265
<211> 328
<212> DNA
<213> Homo sapiens

```

```

<400> 2265
ccatgggaat aggccaacac ggatggatct actgtataac ttgcctgcc a tcaggaaaga
60
gtcaacacgg cagacacatg ctggcagaaa ccctgctgga gttgccctg agcattgatg
120
cataccaccc gagaggagga gaggggtggtg ggagaaatca gatcagagtt caaaatgcac
180
cggaagggtc cggaaatgta agactgcacc ttgcaggaac tgtaaatgcc actaccaata
240
tcaactcactt acgtcaagca cttgagagca gctgcgaaca caattctctg actcctaacc
300
tttagcacgt gactggggacc actggaca
328

```

```

<210> 2266
<211> 100
<212> PRT
<213> Homo sapiens

```

```

<400> 2266
Met Gly Ile Gly Gln His Gly Trp Ile Tyr Cys Ile Thr Cys Leu Pro
1      5      10      15
Ser Gly Lys Ser Gln His Gly Arg His Met Leu Ala Glu Thr Leu Leu
20     25     30
Glu Leu Pro Leu Ser Ile Asp Ala Tyr His Pro Arg Gly Gly Glu Gly
35     40     45
Gly Gly Arg Asn Gln Ile Arg Val Gln Asn Ala Pro Glu Gly Leu Gly
50     55     60
Asn Val Arg Leu His Leu Ala Gly Thr Val Asn Ala Thr Thr Asn Ile
65     70     75     80
Thr His Leu Arg Gln Ala Leu Glu Ser Ser Cys Glu His Asn Ser Leu
85     90     95
Thr Pro Asn Leu
100

```

```

<210> 2267
<211> 370
<212> DNA
<213> Homo sapiens

```

```

<400> 2267

```

agatctatgc aggtagcgct ggtctccggg gggtaagttg tccactccct gtcagatggc
 60
 agaccatgga gggctaagtc aggctgggaa ggctaggcag agttcccaga aacaggtcac
 120
 cgaggggagcc accactgaat tgcactctcg ctggggagtt aagccatatt ccctaagac
 180
 agcagtgacc ggagtggcca atctgtacag ggacaggctc aaggccacag caactcaggg
 240
 gacagagatg gtgaagcagg catgtcctaa agcctccctt cttaaccctg acctgaagg
 300
 acaggaaaca agtcatttac gtatgttgta ggcctagagc aagggattgc agagatgggc
 360
 gtcaacgcgt
 370

<210> 2268

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2268

Met	Ala	Asp	His	Gly	Gly	Leu	Met	Gln	Ala	Gly	Lys	Ala	Arg	Gln	Ser
1				5					10				15		
Ser	Gln	Lys	Gln	Val	Thr	Glu	Gly	Ala	Thr	Glu	Leu	His	Ser	Arg	
			20					25				30			
Trp	Gly	Val	Lys	Pro	Tyr	Pro	Pro	Lys	Thr	Ala	Val	Thr	Gly	Val	Ala
			35					40				45			
Asn	Leu	Tyr	Arg	Asp	Arg	Leu	Lys	Ala	Thr	Ala	Thr	Gln	Gly	Thr	Glu
			50				55				60				
Met	Val	Lys	Gln	Ala	Cys	Pro	Lys	Ala	Ser	Leu	Leu	Asn	Pro	Asp	Leu
					70				75					80	
Glu	Gly	Gln	Glu	Thr	Ser	His	Leu	Arg	Met	Leu					
				85					90						

<210> 2269

<211> 507

<212> DNA

<213> Homo sapiens

<400> 2269

ctctccgacc gcgtcaaccc cggcaatatt cgcaagttcg acgaccagat cgaatcgatt
 60
 tgtaaggctg ccacogagca cggtagcagc atccgaatcg cggtgaatgc tgggtctctc
 120
 gacaaacgtc tgcttgacaa atacggagcc cgcaccgccg aggcctatgt ggagtcggca
 180
 ctgtgggagg ccagcctctt tgagcaatac ggattccggg atttcaaaat ctcggtgaag
 240
 caccacgacc cggctgctcat gatccgtgcc tatgaacagc tcgccgccaa atcgattat
 300
 ccccttcatt tgggcgttac tgaggctggt ccggccttcc aaggcaccat caagtcggcg
 360
 gtggccttcg ggcattctct tgccgagggg atcggcgata ccatacgcgt ctccttgctg
 420

gctgatccgg tcgaggaagt caaggtgggt atcaagatcc tggagtcgct caacctacgt
 480
 cctcgaggtc tagagatcgt ctccctgc
 507

<210> 2270
 <211> 169
 <212> PRT
 <213> Homo sapiens

<400> 2270
 Leu Ser Asp Arg Val Asn Pro Gly Asn Ile Arg Lys Phe Asp Asp Gln
 1 5 10 15
 Ile Glu Ser Ile Cys Lys Ala Ala Thr Glu His Gly Thr Ser Ile Arg
 20 25 30
 Ile Gly Val Asn Ala Gly Ser Leu Asp Lys Arg Leu Leu Asp Lys Tyr
 35 40 45
 Gly Ala Pro Thr Ala Glu Ala Met Val Glu Ser Ala Leu Trp Glu Ala
 50 55 60
 Ser Leu Phe Glu Gln Tyr Gly Phe Arg Asp Phe Lys Ile Ser Val Lys
 65 70 75 80
 His His Asp Pro Val Val Met Ile Arg Ala Tyr Glu Gln Leu Ala Ala
 85 90 95
 Lys Cys Asp Tyr Pro Leu His Leu Gly Val Thr Glu Ala Gly Pro Ala
 100 105 110
 Phe Gln Gly Thr Ile Lys Ser Ala Val Ala Phe Gly His Leu Leu Ala
 115 120 125
 Glu Gly Ile Gly Asp Thr Ile Arg Val Ser Leu Ser Ala Asp Pro Val
 130 135 140
 Glu Glu Val Lys Val Gly Ile Lys Ile Leu Glu Ser Leu Asn Leu Arg
 145 150 155 160
 Pro Arg Gly Leu Glu Ile Val Ser Cys
 165

<210> 2271
 <211> 573
 <212> DNA
 <213> Homo sapiens

<400> 2271
 nncgccgacc cggacttcca ggagatgtta cgtgcgctgg tggacttcga cgaagacatc
 60
 ccgatggtcg acgaaagcct ggaacagttc gccagttgc tcaaaacccg cacctcgga
 120
 gaaggcatgg cgccgttgac ctcggacgcg gtggcgcggt tggccactta cagcgacg
 180
 ctggcggaacc accaaggcg tggtgccgcg cgcattggcg acttggtcca actggtcagc
 240
 gaggcggaact ttatccgcca cctggcgggc gacgagatga ctgatgccgg ccatatcgaa
 300
 cgggcgctca aggccaaggc cagcggtacc gggcggtgat cgggcgggat tctcgacgac
 360
 atgctcgctg gggctcctct gatcgacacc gccggtgctg ccgtggggcaa atgcaacggg
 420

ctgacggtgc tgggaagtcg cgattcggcg ttcggcgtgc cggcgcgat ttcgccacg
 480
 gtgtaccgcg gcggcagcgg cattgtcgac atcgagcgcg aagttaacct cggccagcgg
 540
 atccactcca agggcgtgat gatccttacc ggt
 573

<210> 2272

<211> 191

<212> PRT

<213> Homo sapiens

<400> 2272

Xaa	Ala	Asp	Pro	Asp	Phe	Gln	Glu	Met	Leu	Arg	Ala	Leu	Val	Asp	Phe
1				5					10				15		
Asp	Glu	Asp	Ile	Pro	Met	Val	Asp	Glu	Ser	Leu	Glu	Gln	Phe	Ala	Gln
	20						25					30			
Leu	Leu	Lys	Thr	Arg	Thr	Ser	Glu	Glu	Gly	Met	Ala	Pro	Leu	Thr	Ser
	35					40					45				
Asp	Ala	Val	Ala	Arg	Leu	Ala	Thr	Tyr	Ser	Ala	Arg	Leu	Ala	Asp	His
	50				55					60					
Gln	Gly	Arg	Val	Ser	Ala	Arg	Ile	Gly	Asp	Leu	Phe	Gln	Leu	Val	Ser
65					70				75				80		
Glu	Ala	Asp	Phe	Ile	Arg	His	Leu	Ala	Gly	Asp	Glu	Met	Thr	Asp	Ala
			85						90				95		
Gly	His	Ile	Glu	Arg	Ala	Leu	Lys	Ala	Lys	Ala	Thr	Arg	Thr	Gly	Arg
			100				105						110		
Val	Ser	Ala	Arg	Ile	Leu	Asp	Asp	Met	Leu	Ala	Gly	Val	Ile	Leu	Ile
		115				120					125				
Asp	Thr	Ala	Gly	Ala	Ala	Val	Gly	Lys	Cys	Asn	Gly	Leu	Thr	Val	Leu
	130				135					140					
Glu	Val	Gly	Asp	Ser	Ala	Phe	Gly	Val	Pro	Ala	Arg	Ile	Ser	Ala	Thr
145					150					155				160	
Val	Tyr	Pro	Gly	Gly	Ser	Gly	Ile	Val	Asp	Ile	Glu	Arg	Glu	Val	Asn
			165						170					175	
Leu	Gly	Gln	Pro	Ile	His	Ser	Lys	Gly	Val	Met	Ile	Leu	Thr	Gly	
			180					185					190		

<210> 2273

<211> 4355

<212> DNA

<213> Homo sapiens

<400> 2273

tctttccagc atgcctccgg cttcttgggg gaacacagtc ccggtggtca gaggtcctgc
 60
 aggggaggcc tctctctgga acgcctacc aactccatcg cctcccgtt ccgcctgaca
 120
 gagaggagg aggaagtgat cacctgtttt gagaggcct cctggatcgc tcaggtgttc
 180
 ctgcaggaat tggagaagac cacaataac agcacgtcga ggcatctgaa aggctgtcac
 240
 ccgcttgact atgagctcac ctacttctcg gaagctgccc tccagagcgc ctatgtgaaa
 300

aacctgaaga aggggaacat cgtgaagggc atgagagagc tccgggaggt gctgcggact
360
gtggagacca aagcaactca gaacttcaaa gtgatggcgg ccaagcacct ggcgggggtc
420
ctgctgcact ccttgagtgg agtgctactg gagccccctg tccccacctc tgcctgagtt
480
atgggcaagg aggagagtgc ttctgccact caggccctgc ggaacctca cctctatgaa
540
ggagacaacc tctactgccc caaggacaac atcgaggaag ccctcctgct cctcctcatc
600
agcgaatcca tggcaactcg agatgtggtg ctgagccggg tgccggagca ggaggaggac
660
cggacagtga gcttcgagaa tgccgcagcc atctatgacc tcctgagcat cagtttgggc
720
agaaggggac agtacgtcat gctctcggag tgccctggagc gagccatgaa gtttgcgttt
780
ggagaatttc acctttggta ccagggtggcc ctctccatgg tggcttctgg gaagtgcacc
840
tacgctgtgt ccctgctgog ggagtgtgtg aagttgcggc cctcgagacc caccgtgcc
900
ctgatggccg cgaaggtctg catcgggtcc ctctcgtggc tagaggaagc agagcacttt
960
gccatgatgg tgatcagcct cggagagga gcccgggagt tcctccccc aa gggctaactg
1020
gctctgggtc tcacctatag cctgcaggcc accgacgcca cctgaagtc caagcaagat
1080
gaattgcacc ggaaggcact cgacacgctg gagagggtc agcagctggc gcccatgac
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1200
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1380
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1440
accctgtaca gttctccca gctgggaggc ctagaaaagg atggcagctt cggtgagggc
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1560
tctggctccc ggcgggcttc gtccatcgcc gcctccggc tggaggaggc catgtcagag
1620
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1680
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1800
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1860
ctcacggta acccagatgg cgtgcgcac atgcatagcc tgggtctgat gctgagtcgg
1920

ctggggccaca agagcttggc ccagaagggtg cttcgtgatg ccgtggagag gcagagtacg
1980
tgccacgagg cgtggcaggg cctgggcgag gtgctgcagg ccaggggcca gaacgaggct
2040
gccgttgact gcttcctcac cgccttgag ctggaggcca gcagccctgt actgcccttc
2100
tccatcatcc ccagagagct ctgacgacgc tgcagccgca gggagggagg ggtggccag
2160
agggagaggc agcagggaac gtgggtcagg gtggggcaac agtggcatca ggtgcggggc
2220
ctcagggaaa tacatcttta gtgaacgcct ctgcagctgc agccctcggt ctcttggtg
2280
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2340
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2460
ggttctcact cccactctc agcacagtac agacttctgg atctctctca ggtcttgccc
2520
agggcgggtca caatgtgaag aaactgcggg caagtgggaa gactatgaga tttctgggtt
2580
ccctctctcag acttgaggt agtagatgat tctgcattg cccctgcttg ccctctgaga
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2820
cagtcctttc taataacctg agtcaacaca ttactcctgc aggtcttagg ctacaatgca
2880
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2940
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3000
cctgcctgag agagacctga ggaggggaca gagccagcc cctctctctg ggctgagcag
3060
gcctctgtgt ccatgacacc tgtcttccgg gcctgggggg tgtgggtgta tgtctccct
3120
actggcttcc ccggccctg ctgcatgatg ctcttggaa ccttccccc gtagtcagtc
3180
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3240
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3300
atcatagctc caccttctc ggaaggagtg ggctgttgga gacccccat ccatggcaca
3360
ctagctcagc actgcatttc ccgagatgat tcccaagaca gctgggtgct cctggctttc
3420
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<210> 2274

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2274

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 Ile Ala Ser Arg Phe Arg Leu Thr Glu Arg Glu Glu Val Ile Thr
 35 40 45
 Cys Phe Glu Arg Ala Ser Trp Ile Ala Gln Val Phe Leu Gln Glu Leu
 50 55 60
 Glu Lys Thr Thr Asn Asn Ser Thr Ser Arg His Leu Lys Gly Cys His
 65 70 75 80
 Pro Leu Asp Tyr Glu Leu Thr Tyr Phe Leu Glu Ala Ala Leu Gln Ser
 85 90 95
 Ala Tyr Val Lys Asn Leu Lys Lys Gly Asn Ile Val Lys Gly Met Arg
 100 105 110
 Glu Leu Arg Glu Val Leu Arg Thr Val Glu Thr Lys Ala Thr Gln Asn
 115 120 125
 Phe Lys Val Met Ala Lys His Leu Ala Gly Val Leu Leu His Ser
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145

150

155

<210> 2275

<211> 608

<212> DNA

<213> Homo sapiens

<400> 2275

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120

aaggagaaca ggagacctca aaaggaagaa ccaggctgtg cccaacctt ttttccaaac
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caaagtcttg gttcactac acccactgct atgacacctc ctgttctaac cacagccgaa
240

acttcagtca agcccagtgt ctctgcattc actcattccc caccagaaaa cacaactggg
300

atttcaagca caatcagttt tcattcaaga actcttaatc tgacagatgt gattgaagaa
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ctagcccaag caagtactca gactttgaag agcacaattg cttctgaaac aactttgtcc
420

agcaaatcac accagagtac cacaactagg aaagcaatca ttgacactc aaccatacca
480

ccattcttga gcagcagtg c tactctaata ccagttccca tctccccctc ctttactcag
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608

<210> 2276

<211> 167

<212> PRT

<213> Homo sapiens

<400> 2276

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20 25 30

Pro Thr Ala Met Thr Pro Pro Val Leu Thr Thr Ala Glu Thr Ser Val
35 40 45

Lys Pro Ser Val Ser Ala Phe Thr His Ser Pro Pro Glu Asn Thr Thr
50 55 60

Gly Ile Ser Ser Thr Ile Ser Phe His Ser Arg Thr Leu Asn Leu Thr
65 70 75 80

Asp Val Ile Glu Glu Leu Ala Gln Ala Ser Thr Gln Thr Leu Lys Ser
85 90 95

Thr Ile Ala Ser Glu Thr Thr Leu Ser Ser Lys Ser His Gln Ser Thr
100 105 110

Thr Thr Arg Lys Ala Ile Ile Arg His Ser Thr Ile Pro Pro Phe Leu
115 120 125

Ser Ser Ser Ala Thr Leu Ile Pro Val Pro Ile Ser Pro Pro Phe Thr

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Gln Arg Ala Val Thr Asp Asn Val Ala Thr Pro Ile Ser Gly Leu Met
145              150              155              160
Thr Asn Thr Val Val Lys Leu
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<210> 2277
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<212> DNA
<213> Homo sapiens

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<210> 2278
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<212> PRT
<213> Homo sapiens

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Gly Arg Ser Ser Pro Gly Thr Ala Gln Pro Gly Pro Xaa Thr Lys Ser
20      25      30
Cys Cys Pro Pro Trp Leu Ser Ser Pro Pro Ala Ala Cys Leu Pro Ser
35      40      45
Ser Leu Leu Ser Pro Tyr Pro Val Leu Pro Ser Pro Ser Cys Lys Val
50      55      60
His Ala Thr Pro Gln Glu Glu Pro Gln Arg Leu Ser Ser Asp Pro Thr
65      70      75      80
Leu Ser Ala Pro Thr Leu Pro Pro His Gln Ile Leu Ser Thr Pro
85      90      95

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<210> 2279

<211> 331

<212> DNA

<213> Homo sapiens

<400> 2279

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<210> 2280

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2280

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Arg Val Arg Arg Thr Leu Pro Asp Gln Gly Asp Ala Gln Gly Pro Arg
20        25        30
Glu Cys Met Glu Ser Glu Gly Thr Gly Pro Thr His Ser Pro Ser Ser
35        40        45
Pro Ala Val Leu Phe Ser Phe Leu His Cys Ala Phe Val Ser Phe Leu
50        55        60
Gly Thr Ser Phe Thr Pro Ala Cys Ile Ser Ser Leu Ser His Gly Ser
65        70        75        80
Pro Leu Ser Trp Ser Ser Gly Ala Val Pro Ile
85        90

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<210> 2281

<211> 409

<212> DNA

<213> Homo sapiens

<400> 2281

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300

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 409

<210> 2282
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 2282
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 20 25 30
 Pro Ser Glu Asp Ser Arg Gly Thr Phe Val Pro Asp Ile Leu His Gly
 35 40 45
 Asn Phe Gln Glu Gly Gly Gln Leu Ala Ser Ala Ala Pro Asp Leu Trp
 50 55 60
 Ile Asp Ala Lys Lys Pro Phe Ser Leu Lys Ala Asp Gly Glu Asn Pro
 65 70 75 80
 Asp Ile Leu Thr His Cys Glu His Asp Tyr Gly Glu Thr Thr Thr Arg
 85 90 95

<210> 2283
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 <212> DNA
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<210> 2284
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 <212> PRT
 <213> Homo sapiens

<400> 2284
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 His Leu Leu Val Val Phe Phe Leu Val Gly Ala Val Pro Thr Ile Ser

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Ser	Lys	Phe	Arg	Arg	Lys	Phe	Ile	Val	Lys	Tyr	Ser	Ala	Thr	Ser	Phe				
35										40					45				
Leu	Leu	Cys	His	Leu	Gly	Gly	Gly	Cys	Asn	Phe	Pro	His	His	Cys	Arg				
50										55					60				
Val	Leu	Arg	Asn	Arg	Leu	Gln	Pro	Cys	His	Arg	Ser	Ser	Gln	Leu	His				
65										70					75				
Gln	Ala	Phe	Gly	Arg	Ala	Val	Ile	Arg	Leu	Pro	Ala	Lys	Ala	Gln	Ala				
85										90					95				
Ser	His	Ala	Thr	Ser	Ser	Pro	Lys	Met	Arg	Lys	Val	Arg	Thr	Arg	Lys				
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Gln	Gly	Ala	Val	Glu	Arg	Ser	Ser	Ala	Pro										
115										120									

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<211> 6505

<212> DNA

<213> Homo sapiens

<400> 2285

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 6505

<210> 2286

<211> 1784

<212> PRT

<213> Homo sapiens

<400> 2286

Pro Val Pro Ala Met Pro Gly Gly Pro Ser Pro Arg Ser Pro Ala Pro
 1 5 10 15
 Leu Leu Arg Pro Leu Leu Leu Leu Cys Ala Leu Ala Pro Gly Ala
 20 25 30
 Pro Gly Pro Ala Pro Gly Arg Ala Thr Glu Gly Arg Ala Ala Leu Asp
 35 40 45
 Ile Val His Pro Val Arg Val Asp Ala Gly Gly Ser Phe Leu Ser Tyr
 50 55 60
 Glu Leu Trp Pro Arg Ala Leu Arg Lys Arg Asp Val Ser Val Arg Arg
 65 70 75 80
 Asp Ala Pro Ala Phe Tyr Glu Leu Gln Tyr Arg Gly Arg Glu Leu Arg
 85 90 95
 Phe Asn Leu Thr Ala Asn Gln His Leu Leu Ala Pro Gly Phe Val Ser
 100 105 110
 Glu Thr Arg Arg Arg Gly Gly Leu Gly Arg Ala His Ile Arg Ala His
 115 120 125
 Thr Pro Ala Cys His Leu Leu Gly Glu Val Gln Asp Pro Glu Leu Glu
 130 135 140
 Gly Gly Leu Ala Ala Ile Ser Ala Cys Asp Gly Leu Lys Gly Val Phe
 145 150 155 160
 Gln Leu Ser Asn Glu Asp Tyr Phe Ile Glu Pro Leu Asp Ser Ala Pro
 165 170 175
 Ala Arg Pro Gly His Ala Gln Pro His Val Val Tyr Lys Arg Gln Ala
 180 185 190
 Pro Glu Arg Leu Ala Gln Arg Gly Asp Ser Ser Ala Pro Ser Thr Cys

195					200					205					
Ser	Ala	Ser	Val	Pro	Arg	Ala	Gly	Val	Ser	Thr	Gly	Ala	Leu	Gly	Ala
210					215					220					
Ala	Ala	Ala	Val	Ala	Ala	Ala	Ala	Thr	Ala	Arg	Arg	Leu	His	Gln	Arg
225					230					235					240
Val	Ser	Lys	Glu	Lys	Trp	Val	Glu	Thr	Leu	Val	Val	Ala	Asp	Ala	Lys
					245					250					255
Met	Val	Glu	Tyr	His	Gly	Gln	Pro	Gln	Val	Glu	Ser	Tyr	Val	Leu	Thr
					260					265					270
Ile	Met	Asn	Met	Val	Ala	Gly	Leu	Phe	His	Asp	Pro	Ser	Ile	Gly	Asn
					275					280					
Pro	Ile	His	Ile	Thr	Ile	Val	Arg	Leu	Val	Leu	Leu	Glu	Asp	Glu	Glu
					290					295					300
Glu	Asp	Leu	Lys	Ile	Thr	His	Ala	Asp	Asn	Thr	Leu	Lys	Ser	Phe	
305					310					315					320
Cys	Lys	Trp	Gln	Lys	Ser	Ile	Asn	Met	Lys	Gly	Asp	Ala	His	Pro	Leu
					325					330					335
His	His	Asp	Thr	Ala	Ile	Leu	Leu	Thr	Arg	Lys	Asp	Leu	Cys	Ala	Ala
					340					345					350
Met	Asn	Arg	Pro	Cys	Glu	Thr	Leu	Gly	Leu	Ser	His	Val	Ala	Gly	Met
					355					360					365
Cys	Gln	Pro	His	Arg	Ser	Cys	Ser	Ile	Asn	Glu	Asp	Thr	Gly	Leu	Pro
					370					375					380
Leu	Ala	Phe	Thr	Val	Ala	His	Glu	Leu	Gly	His	Ser	Phe	Gly	Ile	Gln
385					390					395					400
His	Asp	Gly	Ser	Gly	Asn	Asp	Cys	Glu	Pro	Val	Gly	Lys	Arg	Pro	Phe
					405					410					415
Ile	Met	Ser	Pro	Gln	Leu	Leu	Tyr	Asp	Ala	Ala	Pro	Leu	Thr	Trp	Ser
					420					425					430
Arg	Cys	Ser	Arg	Gln	Tyr	Ile	Thr	Arg	Phe	Leu	Asp	Arg	Gly	Trp	Gly
					435					440					445
Leu	Cys	Leu	Asp	Asp	Pro	Pro	Ala	Lys	Asp	Ile	Ile	Asp	Phe	Pro	Ser
					450					455					460
Val	Pro	Pro	Gly	Val	Leu	Tyr	Asp	Val	Ser	His	Gln	Cys	Arg	Leu	Gln
465					470					475					480
Tyr	Gly	Ala	Tyr	Ser	Ala	Phe	Cys	Glu	Asp	Met	Asp	Asn	Val	Cys	His
					485					490					495
Thr	Leu	Trp	Cys	Ser	Val	Gly	Thr	Thr	Cys	His	Ser	Lys	Leu	Asp	Ala
					500					505					510
Ala	Val	Asp	Gly	Thr	Arg	Cys	Gly	Glu	Asn	Lys	Trp	Cys	Leu	Ser	Gly
					515					520					525
Glu	Cys	Val	Pro	Val	Gly	Phe	Arg	Pro	Glu	Ala	Val	Asp	Gly	Gly	Trp
					530					535					540
Ser	Gly	Trp	Ser	Ala	Trp	Ser	Ile	Cys	Ser	Arg	Ser	Cys	Gly	Met	Gly
545					550					555					560
Val	Gln	Ser	Ala	Glu	Arg	Gln	Cys	Thr	Gln	Pro	Thr	Pro	Lys	Tyr	Lys
					565					570					575
Gly	Arg	Tyr	Cys	Val	Gly	Glu	Arg	Lys	Arg	Phe	Arg	Leu	Cys	Asn	Leu
					580					585					590
Gln	Ala	Cys	Pro	Ala	Gly	Arg	Pro	Ser	Phe	Arg	His	Val	Gln	Cys	Ser
					595					600					605
His	Phe	Asp	Ala	Met	Leu	Tyr	Lys	Gly	Gln	Leu	His	Thr	Trp	Val	Pro
					610					615					620
Val	Val	Asn	Asp	Val	Asn	Pro	Cys	Glu	Leu	His	Cys	Arg	Pro	Ala	Asn

625	630										635					640				
Glu Tyr Phe Ala Lys Lys Leu Arg Asp Ala Val Val Asp Gly Thr Pro	645										650					655				
Cys Tyr Gln Val Arg Ala Ser Arg Asp Leu Cys Ile Asn Gly Ile Cys	660										665					670				
Lys Asn Val Gly Cys Asp Phe Glu Ile Asp Ser Gly Ala Met Glu Asp	675										680					685				
Arg Cys Gly Val Cys His Gly Asn Gly Ser Thr Cys His Thr Val Ser	690										695					700				
Gly Thr Phe Xaa Arg Arg Pro Arg Val Xaa Gly Tyr Val Asp Val Gly	705										710					715				
Leu Ile Pro Ala Gly Ala Arg Glu Ile Arg Ile Gln Glu Val Ala Glu	720										725					730				
Ala Ala Asn Phe Leu Ala Leu Arg Ser Glu Asp Pro Glu Lys Tyr Phe	735										740					745				
Leu Asn Gly Gly Trp Thr Ile Gln Trp Asn Gly Asp Tyr Gln Val Ala	750										755					760				
Gly Thr Thr Phe Thr Tyr Ala Arg Arg Gly Asn Trp Glu Asn Leu Thr	765										770					775				
Ser Pro Gly Pro Thr Lys Glu Pro Val Trp Ile Gln Val Pro Ala Ser	780										785					790				
Arg Gly Pro Gly Gly Gly Ser Arg Gly Gly Val Pro Arg Pro Ser Thr	795										800					805				
Leu His Gly Arg Ser Arg Pro Gly Gly Val Ser Pro Gly Ser Val Thr	810										815					820				
Glu Pro Gly Ser Glu Pro Gly Pro Pro Ala Ala Ala Ser Thr Ser Val	825										830					835				
Ser Pro Ser Leu Lys Trp Pro Asn Leu Val Ala Ala Val His Arg Gly	840										845					850				
Gly Trp Gly Gln Ala Pro Leu Gly Leu Gly Tyr Trp Arg Arg His Leu	855										860					865				
Val Leu Met Gly Pro Arg Leu Pro Thr Gln Leu Leu Phe Gln Glu Ser	870										875					880				
Asn Pro Gly Val His Tyr Glu Tyr Thr Ile His Arg Glu Ala Gly Gly	885										890					895				
His Asp Glu Val Pro Pro Pro Val Phe Ser Trp His Tyr Gly Pro Trp	900										905					910				
Thr Lys Cys Thr Val Thr Cys Gly Arg Gly Val Gln Arg Gln Asn Val	915										920					925				
Tyr Cys Leu Glu Arg Gln Ala Gly Pro Val Asp Glu Glu His Cys Asp	930										935					940				
Pro Leu Gly Arg Pro Asp Asp Gln Gln Arg Lys Cys Ser Glu Gln Pro	945										950					955				
Cys Pro Ala Arg Trp Trp Ala Gly Glu Trp Gln Leu Cys Ser Ser Ser	960										965					970				
Cys Gly Pro Gly Gly Leu Ser Arg Arg Ala Val Leu Cys Ile Arg Ser	975										980					985				
Val Gly Leu Asp Glu Gln Ser Ala Leu Glu Pro Pro Ala Cys Glu His	990										995					1000				
Leu Pro Arg Pro Pro Thr Glu Thr Pro Cys Asn Arg His Val Pro Cys	1005										1010					1015				
Pro Ala Thr Trp Ala Val Gly Asn Trp Ser Gln Cys Ser Val Thr Cys	1020										1025					1030				
Gly Glu Gly Thr Gln Arg Arg Asn Val Leu Cys Thr Asn Asp Thr Gly	1035										1040					1045				

	1060		1065		1070
Val	Pro Cys Asp Glu Ala Gln Gln	Pro Ala Ser Glu Val Thr Cys Ser			
	1075	1080		1085	
Leu	Pro Leu Cys Arg Trp Pro Leu Gly Thr Leu Gly Pro Glu Gly Ser				
	1090	1095		1100	
Gly	Ser Gly Ser Ser Ser His Glu Leu Phe Asn Glu Ala Asp Phe Ile				
1105	1110	1115		1120	
Pro	His His Leu Ala Pro Arg Pro Ser Pro Ala Ser Ser Pro Lys Pro				
	1125	1130		1135	
Gly	Thr Met Gly Asn Ala Ile Glu Glu Glu Ala Pro Glu Leu Asp Leu				
	1140	1145		1150	
Pro	Gly Pro Val Phe Val Asp Asp Phe Tyr Tyr Asp Tyr Asn Phe Ile				
	1155	1160		1165	
Asn	Phe His Glu Asp Leu Ser Tyr Gly Pro Ser Glu Glu Pro Asp Leu				
	1170	1175		1180	
Asp	Leu Ala Gly Thr Gly Asp Arg Thr Pro Pro His Ser His Pro				
1185	1190	1195		1200	
Ala	Ala Pro Ser Thr Gly Ser Pro Val Pro Ala Thr Glu Pro Pro Ala				
	1205	1210		1215	
Ala	Lys Glu Glu Gly Val Leu Gly Pro Trp Ser Pro Ser Pro Trp Pro				
	1220	1225		1230	
Ser	Gln Ala Gly Arg Ser Pro Pro Pro Ser Glu Gln Thr Pro Gly				
	1235	1240		1245	
Asn	Pro Leu Ile Asn Phe Leu Pro Glu Glu Asp Thr Pro Ile Gly Ala				
	1250	1255		1260	
Pro	Asp Leu Gly Leu Pro Ser Leu Ser Trp Pro Arg Val Ser Thr Asp				
1265	1270	1275		1280	
Gly	Leu Gln Thr Pro Ala Thr Pro Glu Ser Gln Asn Asp Phe Pro Val				
	1285	1290		1295	
Gly	Lys Asp Ser Gln Ser Gln Leu Pro Pro Pro Trp Arg Asp Arg Thr				
	1300	1305		1310	
Asn	Glu Val Phe Lys Asp Asp Glu Glu Pro Lys Gly Arg Gly Ala Pro				
	1315	1320		1325	
His	Leu Pro Pro Arg Pro Ser Ser Thr Leu Pro Pro Leu Ser Pro Val				
	1330	1335		1340	
Gly	Ser Thr His Ser Ser Pro Ser Pro Asp Val Ala Glu Leu Trp Thr				
1345	1350	1355		1360	
Gly	Gly Thr Val Ala Trp Glu Pro Ala Leu Glu Gly Gly Leu Gly Pro				
	1365	1370		1375	
Val	Asp Ser Glu Leu Trp Pro Thr Val Gly Val Ala Ser Leu Leu Pro				
	1380	1385		1390	
Pro	Pro Ile Ala Pro Leu Pro Glu Met Lys Val Arg Asp Ser Ser Leu				
	1395	1400		1405	
Glu	Pro Gly Thr Pro Ser Phe Pro Ala Pro Gly Pro Gly Ser Trp Asp				
	1410	1415		1420	
Leu	Gln Thr Val Ala Val Trp Gly Thr Phe Leu Pro Thr Thr Leu Thr				
1425	1430	1435		1440	
Gly	Leu Gly His Met Pro Glu Pro Ala Leu Asn Pro Gly Pro Lys Gly				
	1445	1450		1455	
Gln	Pro Glu Ser Leu Ser Pro Glu Val Pro Leu Ser Ser Arg Leu Leu				
	1460	1465		1470	
Ser	Thr Pro Ala Trp Asp Ser Pro Ala Asn Ser His Arg Val Pro Glu				
	1475	1480		1485	
Thr	Gln Pro Leu Ala Pro Ser Leu Ala Glu Ala Gly Pro Pro Ala Asp				

1490 1495 1500
 Pro Leu Val Val Arg Asn Ala Ser Trp Gln Ala Gly Asn Trp Ser Glu
 1505 1510 1515 1520
 Cys Ser Thr Thr Cys Gly Leu Gly Ala Val Trp Arg Pro Val Arg Cys
 1525 1530 1535
 Ser Ser Gly Arg Asp Glu Asp Cys Ala Pro Ala Gly Arg Pro Gln Pro
 1540 1545 1550
 Ala Arg Arg Cys His Leu Arg Pro Cys Ala Thr Trp His Ser Gly Asn
 1555 1560 1565
 Trp Ser Lys Cys Ser Arg Ser Cys Gly Gly Ser Ser Val Arg Asp
 1570 1575 1580
 Val Gln Cys Val Asp Thr Arg Asp Leu Arg Pro Leu Arg Pro Phe His
 1585 1590 1595 1600
 Cys Gln Pro Gly Pro Ala Lys Pro Pro Ala His Arg Pro Cys Gly Ala
 1605 1610 1615
 Gln Pro Cys Leu Ser Trp Tyr Thr Ser Ser Trp Arg Glu Cys Ser Glu
 1620 1625 1630
 Ala Cys Gly Gly Gly Glu Gln Arg Leu Val Thr Cys Pro Glu Pro
 1635 1640 1645
 Gly Leu Cys Glu Glu Ala Leu Arg Pro Asn Thr Thr Arg Pro Cys Asn
 1650 1655 1660
 Thr His Pro Cys Thr Gln Trp Val Val Gly Pro Trp Gly Gln Cys Ser
 1665 1670 1675 1680
 Ala Pro Cys Gly Gly Gly Val Gln Arg Arg Leu Val Lys Cys Val Asn
 1685 1690 1695
 Thr Gln Thr Gly Leu Pro Glu Glu Asp Ser Asp Gln Cys Gly His Glu
 1700 1705 1710
 Ala Trp Pro Glu Ser Ser Arg Pro Cys Gly Thr Glu Asp Cys Glu Pro
 1715 1720 1725
 Val Glu Pro Pro Arg Cys Glu Arg Asp Arg Leu Ser Phe Gly Phe Cys
 1730 1735 1740
 Glu Thr Leu Arg Leu Leu Gly Arg Cys Gln Leu Pro Thr Ile Arg Thr
 1745 1750 1755 1760
 Gln Cys Cys Arg Ser Cys Ser Pro Pro Ser His Gly Ala Pro Ser Arg
 1765 1770 1775
 Gly His Gln Arg Val Ala Arg Arg
 1780

<210> 2287

<211> 750

<212> DNA

<213> Homo sapiens

<400> 2287

tgacacaggt tatttctctt tgggttaaata tcttacaagt ctttttttaa tcttcactt
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 tggcgctataa aagtatcatc atccccattt tacagaatgg gaaagtaagg cgtggggagg
 120
 ttgaggacat ttgtacagag tcaggttaact ggaggaactg gactacaacc ctgctcagt
 180
 cagccagtgt gactgagcgc ctctgagag ccaggtggat tctgccctca aggatccatg
 240
 ctctggggcaa gaaaccacc catcagcagg tggcttctgc tgagcccaa caggcacaca
 300

gaggggtcca tgggagccca gaggggagca tctgaccagg ctcaggggaa ggaatgtgtc
 360
 cagcagagtc acagaggagc agtatgagtt agccaggtag gggacattcc aggcagggga
 420
 gcagcaggac aaaagcatag aggttagcact gccagtgcc agttccaaaa taagagggtg
 480
 actgctacag ggtccatata ggaaataat gggaaataca tttagacagg aggtggggtc
 540
 tgtaacaaag gactttaatt ccagggttaag gaatctggat gttaaaacaa cattagctgc
 600
 cattttaca gtgctacttc ccaggctctg tgcctttctg ggagccttga aggtttgtga
 660
 gctggaagga gatattagga acaaaacgat gcatgaggat agctcaggta aaggttattg
 720
 ataagtaaga atgcctggca ccaaacgcgt
 750

<210> 2288

<211> 142

<212> PRT

<213> Homo sapiens

<400> 2288

Met Ala Ala Asn Val Val Leu Thr Ser Arg Phe Leu Asn Leu Glu Leu
 1 5 10 15
 Lys Ser Phe Val Thr Asp Pro Thr Ser Cys Pro Asn Val Phe Pro Ile
 20 25 30
 Ile Phe Leu Tyr Gly Pro Cys Ser Ser Gln Pro Leu Ile Leu Glu Leu
 35 40 45
 Gly Thr Gly Ser Ala Thr Ser Met Leu Leu Ser Cys Cys Ser Pro Ala
 50 55 60
 Trp Asn Val Pro Tyr Leu Ala Asn Ser Tyr Cys Ser Ser Val Thr Leu
 65 70 75 80
 Leu Asp Thr Phe Leu Pro Leu Ser Leu Val Arg Cys Ser Pro Leu Gly
 85 90 95
 Ser His Gly Pro Leu Cys Val Pro Val Val Ala Gln Gln Lys Pro Pro
 100 105 110
 Ala Asp Gly Trp Val Ser Cys Pro Glu His Gly Ser Leu Arg Ala Glu
 115 120 125
 Ser Thr Trp Leu Ser Gly Gly Ala Gln Ser His Trp Leu His
 130 135 140

<210> 2289

<211> 381

<212> DNA

<213> Homo sapiens

<400> 2289

caggacgcgg cctcggcgagg gcccgggccg aacggctgcg gacacctggg cgccgaggag
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 ccgagcgccg ccgcctccgg catggatcat tgcgtgacgg tggagcgcgga gctggagaga
 120
 gtgctgcaca agttctcggg ctacgggcag ctgtgcgagc gcggcctgga ggagctcatc
 180

gactacaccg gcggtctcaa gcaccagatc ctgcagagcc acgccaaga tgctgaatta
 240
 tcaggggacac tttcactgt tttgacacag ggctgtaaaa gaataanaag gggatactgg
 300
 ttcaaaaatt ggcctccgac cacaagaca tccacagcag tggttctcgg gttggaaaag
 360
 ccattgatga ggattcactt t
 381

<210> 2290

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2290

Met	Asp	His	Cys	Val	Thr	Val	Glu	Arg	Glu	Leu	Glu	Lys	Val	Leu	His
1			5						10					15	
Lys	Phe	Ser	Gly	Tyr	Gly	Gln	Leu	Cys	Glu	Arg	Gly	Leu	Glu	Glu	Leu
			20					25					30		
Ile	Asp	Tyr	Thr	Gly	Gly	Leu	Lys	His	Gln	Ile	Leu	Gln	Ser	His	Gly
			35				40					45			
Gln	Asp	Ala	Glu	Leu	Ser	Gly	Thr	Leu	Ser	Leu	Val	Leu	Thr	Gln	Gly
	50					55				60					
Cys	Lys	Arg	Ile	Xaa	Arg	Gly	Tyr	Trp	Phe	Lys	Asn	Trp	Pro	Pro	Thr
65				70						75				80	
Thr	Lys	Thr	Ser	Thr	Ala	Val	Phe	Leu	Gly	Leu	Glu	Lys	Pro	Leu	Met
				85					90					95	
Arg	Ile	His	Phe												
			100												

<210> 2291

<211> 573

<212> DNA

<213> Homo sapiens

<400> 2291

gcattgctcta ccgcaaaagtc ggggtccccc acgattaaaaa tgccccgggtc gaggacagcc
 60
 ttccggcagca ccgactcatt atcggcaccg acctagtcaa ttgccaccac ctgcttatgc
 120
 aagtgggtcga tagaagcccc agccggctta agccagttctt ggaaaaaccac cacatatcgc
 180
 acatgttctgt tgtgacgatg cagctgagcc attgaatcga cggctcagcgc catgaacgcc
 240
 cgatgctcgt tgacggtaag actcgcgcgc ccagcaacgt cggcggttgt cgtgccctca
 300
 tcggtgtgaat ggcgacgagc gacgatgacg tcatgtccgc cggcaaaaga ggctgcggaa
 360
 gcctcgcgta attcttgggg accgaggttc tcggcgcgcgc ggtctgaccc caccgccttg
 420
 aacttggcgt taaggaccga cctcagctga gcctccccctg acgggttaga caggtattcc
 480
 tccctgccagt cccgcgctgc ccgaggcaag ctcattcccc agttgagctg ccaataccgc
 540

cacgacagga tctcgaaaag attggggacg cgt
573

<210> 2292
<211> 140
<212> PRT
<213> Homo sapiens

<400> 2292
Met Ser Leu Pro Arg Ala Ala Arg Asp Trp Gln Glu Glu Tyr Leu Ser
1 5 10 15
Asn Pro Ser Gly Glu Ala His Val Arg Ser Val Leu Asn Ala Lys Phe
20 25 30
Lys Ala Val Gly Ser Asp Arg Arg Ala Glu Asp Leu Gly Pro Gln Glu
35 40 45
Leu Arg Glu Ala Ser Ala Ala Phe Phe Ala Gly Gly His Asp Val Ile
50 55 60
Val Ala Arg Arg His Tyr Thr Asp Glu Gly Thr Thr Thr Ala Asp Val
65 70 75 80
Ala Gly Ser Ala Ser Leu Thr Val Asn Glu His Arg Ala Phe Met Ala
85 90 95
Leu Thr Val Asp Ser Met Ala Gln Leu His Arg His Asn Glu His Val
100 105 110
Arg Tyr Val Val Val Phe Gln Asn Trp Leu Lys Pro Ala Gly Ala Ser
115 120 125
Ile Asp His Leu His Lys Gln Val Val Ala Ile Asp
130 135 140

<210> 2293
<211> 358
<212> DNA
<213> Homo sapiens

<400> 2293
acgcgtgaag gaatggaagc tgctctcgtc ggtgcacaca agactggcgg gtgccattg
60
gtgaacactg tcgctaagaa ctggttgaac cggtcaaca cgccggatat gaaacccact
120
gaggagatca agcggcagtt ccaaggtctg cattggttgg gacgtaagta tgggctcaac
180
cacggagagt tctatcttga cgacgagcag tgggccaacgc tcatggccgg gtcctctttc
240
gaggcgaaac cgcgcattaa gagcaacttt gattccgagg gcgctgttgt ggaatccggat
300
tccgattcac ttgctggggc tgatcgagat gcccgaggtg ctccggatgc atgccttc
358

<210> 2294
<211> 115
<212> PRT
<213> Homo sapiens

<400> 2294
Met Glu Ala Ala Leu Val Gly Ala His Lys Thr Gly Gly Cys Pro Leu

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      1           5           10           15
Val Asn Thr Val Ala Lys Asn Trp Leu Asn Arg Leu Asn Thr Pro Asp
      20
Met Lys Pro Thr Glu Glu Ile Lys Arg Gln Phe Gln Gly Leu His Trp
      35
Leu Gly Arg Lys Tyr Gly Leu Asn His Gly Glu Phe Tyr Leu Asp Asp
      50
Glu Gln Trp Ala Thr Leu Met Ala Gly Ser Ser Phe Glu Ala Asn Pro
      65
Arg Ile Lys Ser Asn Phe Asp Ser Glu Gly Ala Val Val Asp Pro Asp
      85
Ser Asp Ser Leu Ala Gly Ala Asp Arg Asp Ala Arg Gly Ala Ser Asp
      100
Ala Cys Leu
      115

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<210> 2295

<211> 546

<212> DNA

<213> Homo sapiens

<400> 2295

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ggcaccgcatc cgagtgggtg tgccgggatt aggnccgcatc tanaaacatt ctccgcctt
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ggggcggtatg gctgctcggt cattaccgca ctggtagcgc aaaatacgcg cggcgtgcag
120
tcgggtgatc gtatcgaacc ggattttgtc ggtgcacaac tggactctgt gttcagcag
180
gtccgcattg attccaccaa aatcggcatg ctggcagagg cggatatcgt ggaagcggtc
240
gcggagcgcc tcaaacatta tcgcgttaaa aacgtgttac ttgatacggg gatgctggcg
300
aaaagtggcg atccgctgct atctctctgt gctgtcgaaa ctctgcgaaa acaccttctg
360
ccacacgtcg cgctgatcac gccaaatttg cggaggcgg cggcgctgct ggatgcgcct
420
catgcccgtg ccgagcacga gatgaaagag cagggggcgcg cacttctggc gcttggtgc
480
gaggcagtcg tgatgaaagg cggccatctt gacgatcctg agagcccgga ctggctcttc
540
acgcgt
546

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<210> 2296

<211> 182

<212> PRT

<213> Homo sapiens

<400> 2296

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Gly Thr Asp Pro Ser Gly Gly Ala Gly Ile Arg Xaa Asp Leu Xaa Thr
1           5           10           15
Phe Ser Ala Leu Gly Ala Tyr Gly Cys Ser Val Ile Thr Ala Leu Val
20          25          30
Ala Gln Asn Thr Arg Gly Val Gln Ser Val Tyr Arg Ile Glu Pro Asp

```

```

          35              40              45
Phe Val Gly Ala Gln Leu Asp Ser Val Phe Ser Asp Val Arg Ile Asp
 50              55              60
Ser Thr Lys Ile Gly Met Leu Ala Glu Ala Asp Ile Val Glu Ala Val
 65              70              75              80
Ala Glu Arg Leu Lys His Tyr Arg Val Lys Asn Val Val Leu Asp Thr
          85              90              95
Val Met Leu Ala Lys Ser Gly Asp Pro Leu Leu Ser Pro Ala Ala Val
          100              105              110
Glu Thr Leu Arg Lys His Leu Leu Pro His Val Ala Leu Ile Thr Pro
          115              120              125
Asn Leu Pro Glu Ala Ala Ala Leu Leu Asp Ala Pro His Ala Arg Thr
          130              135              140
Glu His Glu Met Lys Glu Gln Gly Arg Ala Leu Leu Ala Leu Gly Cys
          145              150              155              160
Glu Ala Val Leu Met Lys Gly Gly His Leu Asp Asp Pro Glu Ser Pro
          165              170              175
Asp Trp Leu Phe Thr Arg
          180

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<210> 2297

<211> 414

<212> DNA

<213> Homo sapiens

<400> 2297

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gaatttttccc acgttggggg ggggggggttc ggactttttc ccccaaaaac cccccccccc
 120
caccgcccca aaggccgaaa agcaggggcca aaaccccccg gacccccccc gggggggggca
 180
aaaggaaaaa cccctttttt tttttttttt tttatatac atgagggtct ctggttaata
 240
aatgttgaga tgtaggggta ggtgagatta aacaggttct ttttttcattg atttctcgga
 300
gtctttatga tgctccacac cagtacttct caaagctgac tgtgtatata aaacactggg
 360
gatctgaccc acatgtaaag tctgatttct ttgggtctgg gcaggcctga aatn
 414

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<210> 2298

<211> 67

<212> PRT

<213> Homo sapiens

<400> 2298

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Lys Lys Arg Glu Phe Ser His Val Gly Gly Gly Gly Phe Gly Leu Phe
 1              5              10              15
Pro Pro Lys Thr Pro Pro Pro His Pro Pro Lys Gly Arg Lys Ala Gly
          20              25              30
Pro Lys Pro Pro Gly Pro Pro Gly Gly Ala Lys Gly Lys Thr Pro
          35              40              45
Phe Phe Phe Phe Phe Phe Tyr Thr His Glu Gly Leu Trp Leu Ile Asn

```

50
 Val Glu Met
 65

55
 60

<210> 2299
 <211> 987
 <212> DNA
 <213> Homo sapiens

<400> 2299
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 60
 ccgctttcac tcttcgaatt tgtgcttagc tcttttcttg tacctcgca ctcgtgacca
 120
 acatgctgtg atgtgtgccg agggaggaat tggtcagcta cacaacctgg atcttaccac
 180
 agtttgata tgactgaggc tctccaatgg gccagatgc actggcgacg gctgatcaga
 240
 ggtgcaacca gggatgatga ttcagggccca tacaactatt cctcgttgct cgctgtggg
 300
 cgcaagtct ctcagatccc taaactgtca ggaaggcacc ggattgtgtg tccccacac
 360
 cagcccttca aggatgagta tgagaagttc tccggagcct atgtgaacaa tcgaatacga
 420
 acaacaaagt acacacttct gaattttgtg ccaagaaatt tatttgaaca atttcacaga
 480
 gctgccatt tatatttctt gttcctagtt gtcctgaact gggtagcttt ggtagaagcc
 540
 ttccaaaagg aatcacccat gttgcctctg gtgggtgtcc ttacaattat cgcaattaa
 600
 gatggcctgg aagattatcg gaaatacaaa attgacaac agatcaataa ttaataact
 660
 aaagtttata gtaggaaaga gaaaaatac attgaccgat gctggaaaga cgttactgtt
 720
 ggggacttta ttcgcctctc ctgcaacgag gtcacccctg cagacatggt actactctt
 780
 tccactgac cagatggaat ctgtcacatt gagacttctg gtcttgatgg agagagcaat
 840
 ttaaaacaga ggcaggtggg tcggggatat gcagaacagg actctgaagt tgatcctgag
 900
 aagttttcca gtaggataga atgtgaaagc ccaacaatg acctcagcag attccgaggc
 960
 ttctagaac attccaacaa agaacgc
 987

<210> 2300
 <211> 266
 <212> PRT
 <213> Homo sapiens

<400> 2300
 Met Thr Glu Ala Leu Gln Trp Ala Arg Tyr His Trp Arg Arg Leu Ile
 1 5 10 15
 Arg Gly Ala Thr Arg Asp Asp Asp Ser Gly Pro Tyr Asn Tyr Ser Ser

	20						25					30				
Leu	Leu	Ala	Cys	Gly	Arg	Lys	Ser	Ser	Gln	Ile	Pro	Lys	Leu	Ser	Gly	
	35						40				45					
Arg	His	Arg	Ile	Val	Val	Pro	His	Ile	Gln	Pro	Phe	Lys	Asp	Glu	Tyr	
	50					55					60					
Glu	Lys	Phe	Ser	Gly	Ala	Tyr	Val	Asn	Asn	Arg	Ile	Arg	Thr	Thr	Lys	
65					70				75					80		
Tyr	Thr	Leu	Leu	Asn	Phe	Val	Pro	Arg	Asn	Leu	Phe	Glu	Gln	Phe	His	
				85					90					95		
Arg	Ala	Ala	Asn	Leu	Tyr	Phe	Leu	Phe	Leu	Val	Val	Leu	Asn	Trp	Val	
			100				105					110				
Pro	Leu	Val	Glu	Ala	Phe	Gln	Lys	Glu	Ile	Thr	Met	Leu	Pro	Leu	Val	
		115					120					125				
Val	Val	Leu	Thr	Ile	Ile	Ala	Ile	Lys	Asp	Gly	Leu	Glu	Asp	Tyr	Arg	
	130				135					140						
Lys	Tyr	Lys	Ile	Asp	Lys	Gln	Ile	Asn	Asn	Leu	Ile	Thr	Lys	Val	Tyr	
145					150				155					160		
Ser	Arg	Lys	Glu	Lys	Lys	Tyr	Ile	Asp	Arg	Cys	Trp	Lys	Asp	Val	Thr	
				165				170					175			
Val	Gly	Asp	Phe	Ile	Arg	Leu	Ser	Cys	Asn	Glu	Val	Ile	Pro	Ala	Asp	
		180					185					190				
Met	Val	Leu	Leu	Phe	Ser	Thr	Asp	Pro	Asp	Gly	Ile	Cys	His	Ile	Glu	
	195						200					205				
Thr	Ser	Gly	Leu	Asp	Gly	Glu	Ser	Asn	Leu	Lys	Gln	Arg	Gln	Val	Val	
	210				215					220						
Arg	Gly	Tyr	Ala	Glu	Gln	Asp	Ser	Glu	Val	Asp	Pro	Glu	Lys	Phe	Ser	
225					230				235					240		
Ser	Arg	Ile	Glu	Cys	Glu	Ser	Pro	Asn	Asn	Asp	Leu	Ser	Arg	Phe	Arg	
				245				250				255				
Gly	Phe	Leu	Glu	His	Ser	Asn	Lys	Glu	Arg							
		260					265									

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<210> 2301
<211> 390
<212> DNA
<213> Homo sapiens
```

```

<400> 2301
tatcccaagc gcttcaaat tgaatgccat gagttctact tgaatcgtc cgaggaaatg
60
nncgcacact ctcccgcgna ttccctgaa cctcgcgata acactatgga aatcgctgag
120
nncgttgcca cgttgaattc aacacaaacg caanactaca tgcccgatit cccaccccg
180
gagggggaga atgaggaatc ctggttcgtc aaagaagttg aacgcggttt gcactaccga
240
ttccccgagg gcattcccgga tgacgtacgc aagcaggcag attatgaagt agggattatt
300
accacagatg gattccccgg ctacttcttg gtggtcgcgg attttatcaa ctgggcgaag
360
ataaacggaa ttcgagtggg ccccgggcgt
390

```

<210> 2302

<211> 130

<212> PRT

<213> Homo sapiens

<400> 2302

```

Tyr Pro Lys Arg Phe Lys Phe Asp Ala Asp Glu Phe Tyr Leu Lys Ser
 1           5           10           15
Ser Glu Glu Met Xaa Ala Thr Ser Ser Ala Xaa Phe Pro Glu Ala Cys
 20           25           30
Asp Asn Thr Met Glu Ile Ala Glu Xaa Val Ala Thr Leu Asn Ser Thr
 35           40           45
Gln Thr Gln Xaa Tyr Met Pro Asp Phe Pro Thr Pro Glu Gly Glu Asn
 50           55           60
Glu Glu Ser Trp Phe Val Lys Glu Val Glu Arg Gly Leu His Tyr Arg
 65           70           75           80
Phe Pro Glu Gly Ile Pro Asp Asp Val Arg Lys Gln Ala Asp Tyr Glu
 85           90           95
Val Gly Ile Ile Thr Gln Met Gly Phe Pro Gly Tyr Phe Leu Val Val
100           105           110
Ala Asp Phe Ile Asn Trp Ala Lys Asn Asn Gly Ile Arg Val Gly Pro
115           120           125
Gly Arg
130

```

<210> 2303

<211> 638

<212> DNA

<213> Homo sapiens

<400> 2303

```

nnggatccag gctgcccctg tgtgtctcct tcagtcttcg ttgactgcct gctgctgtct
60
gcacctgtgt ttggctacct gggcgaccga catagccgca aggctaccat gagcttcggt
120
atcttctgtt ggtagcagagc tggcctctct agctccttca tctccccccg gtattcttgg
180
ctctctctcc tgtccccggg catcgagggc actggctcgg ccagctactc caccatcgcg
240
cccaccgtcc tggcgacacct ctctgtgagg gaccagcgca cccgcgtgct ggctgtcttc
300
tacatcttta tccccgttgg aagtggctct ggctacgtgc tggggctcgg tgtgacgatg
360
ctgactggga actggcgctg ggcctccga gtcatgccct gcctggaggc cgtggccttg
420
atcctgctta tcctgctggt tccagaccca cccgggggag ctgccgagac acagggggag
480
ggggccgtgg gaggcttcag aagcagctgg tgtgaggacg tcagatacct ggggaaaaaac
540
tggagttttt tgtggctcgc cctcggagtg accgccatgg cctttgtgac tggagccctg
600
gggttctggg cccccaagtt tctgctcgag gcaacgct
638

```

<210> 2304

<211> 212
 <212> PRT
 <213> Homo sapiens

<400> 2304
 Xaa Asp Pro Gly Cys Pro Cys Val Ser Pro Ser Val Phe Val Ser Cys
 1 5 10 15
 Leu Leu Leu Ser Ala Pro Val Phe Gly Tyr Leu Gly Asp Arg His Ser
 20 25 30
 Arg Lys Ala Thr Met Ser Phe Gly Ile Leu Leu Trp Ser Gly Ala Gly
 35 40 45
 Leu Ser Ser Ser Phe Ile Ser Pro Arg Tyr Ser Trp Leu Phe Phe Leu
 50 55 60
 Ser Arg Gly Ile Glu Gly Thr Gly Ser Ala Ser Tyr Ser Thr Ile Ala
 65 70 75 80
 Pro Thr Val Leu Gly Asp Leu Phe Val Arg Asp Gln Arg Thr Arg Val
 85 90 95
 Leu Ala Val Phe Tyr Ile Phe Ile Pro Val Gly Ser Gly Leu Gly Tyr
 100 105 110
 Val Leu Gly Ser Ala Val Thr Met Leu Thr Gly Asn Trp Arg Trp Ala
 115 120 125
 Leu Arg Val Met Pro Cys Leu Glu Ala Val Ala Leu Ile Leu Leu Ile
 130 135 140
 Leu Leu Val Pro Asp Pro Pro Arg Gly Ala Ala Glu Thr Gln Gly Glu
 145 150 155 160
 Gly Ala Val Gly Gly Phe Arg Ser Ser Trp Cys Glu Asp Val Arg Tyr
 165 170 175
 Leu Gly Lys Asn Trp Ser Phe Val Trp Ser Thr Leu Gly Val Thr Ala
 180 185 190
 Met Ala Phe Val Thr Gly Ala Leu Gly Phe Trp Ala Pro Lys Phe Leu
 195 200 205
 Leu Glu Ala Arg
 210

<210> 2305
 <211> 340
 <212> DNA
 <213> Homo sapiens

<400> 2305
 gcccccgcct ctatcttccg gcacgcgtcac agtcgcacgc tgacgggtact ggctggagtc
 60
 tcggaccagc acacttttgac cgtcgtggtc gcctcgtgac atgggggtaac gcgaacctgc
 120
 tcgctcctgt tcttgacctc ttccgtgccc ccattgacaa cgatcgggca agttcactgg
 180
 ccgcgaacgc tattggtgac gcagcactcg cagctggtct cgaccgactc gtccacacca
 240
 cggcgtcggt gcgcgacgag ggcgatgagt tggctcgtct tactcgcagc gctgctgccg
 300
 ccgcacgcaa ttccatgacg acaacgtgga gttggcgcg
 340

<210> 2306

<211> 101
 <212> PRT
 <213> Homo sapiens

<400> 2306

```
Met Glu Leu Arg Ala Ala Ala Ala Leu Arg Val Thr Thr Thr Asn
 1             5             10             15
Ser Ser Pro Ser Ser Arg Thr Asp Ala Val Val Trp Thr Ser Arg Ser
                20             25             30
Arg Pro Ala Ala Ser Ala Ala Ser Pro Ile Ala Leu Arg Ala Ser Glu
 35             40             45
Leu Ala Arg Ser Leu Ser Met Gly Ala Arg Lys Arg Ser Arg Thr Gly
 50             55             60
Ala Thr Arg Phe Ala Leu Pro His Val Thr Arg Arg Pro Arg Arg Ser
 65             70             75             80
Lys Cys Ala Gly Pro Arg Leu Gln Pro Val Pro Ser Arg Cys Asp Cys
                85             90             95
Asp Asp Ala Gly Arg
                100
```

<210> 2307
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 2307

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ngcttctcag ctgaaggggg agataaagct ctacataaga tgggtccagg tgggggcaaa
 60
gccaaaggcac tgggtggggc tggcagtgagg agcaagggct cagcaggtgg cggaagcaag
 120
cgacgggtga gcagcgaaga cagctccctg gagccagacc tggccgagat gagcctggat
 180
gacagcagcc tggccctggg cgcagaggcc aggaccttcg ggggattccc tgagagccct
 240
ccacctgtgc ctctccacgg tggctcccga ggcccttcca ttttcttccc tgagccccca
 300
gatacttatg aagaagatgg tgatgagagt ggcaatgggc ttcccaaaac caaagaggca
 360
```

<210> 2308
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 2308

```
Xaa Phe Ser Ala Glu Gly Gly Asp Lys Ala Leu His Lys Met Gly Pro
 1             5             10             15
Gly Gly Gly Lys Ala Lys Ala Leu Gly Gly Ala Gly Ser Gly Ser Lys
                20             25             30
Gly Ser Ala Gly Gly Gly Ser Lys Arg Arg Leu Ser Ser Glu Asp Ser
 35             40             45
Ser Leu Glu Pro Asp Leu Ala Glu Met Ser Leu Asp Asp Ser Ser Leu
 50             55             60
Ala Leu Gly Ala Glu Ala Arg Thr Phe Gly Gly Phe Pro Glu Ser Pro
```

```

65              70              75              80
Pro Pro Cys Pro Leu His Gly Gly Ser Arg Gly Pro Ser Thr Phe Leu
              85              90              95
Pro Glu Pro Pro Asp Thr Tyr Glu Glu Asp Gly Asp Glu Ser Gly Asn
              100              105              110
Gly Leu Pro Pro Lys Thr Lys Glu Ala
              115              120

```

<210> 2309

<211> 395

<212> DNA

<213> Homo sapiens

<400> 2309

```

ggatccctac aaatggggcc ctgctctgag cacattccca tgagggtctgc ctgccctgtg
60
cactctctgc cctgggcccgc ggggctctgac tgggttccca cctcctccta cccactgggg
120
tcttttcag caggcacagg gattcctcat gggggaggga gagcccaccc gtctgtcttc
180
ggtgacggcc tgagctgtgc acggcctccc ctgccctcct gttctcaggc cccccagggt
240
ccatccagcc ccagcgtgtg gcgttctggc tcttccttgg agtctcctcc cagaccacgc
300
gactccactc acactgtgcc tagcggactg tgtggttgat gcagccggct cacttgagtg
360
tgttgtgtta tgcccacaac aggccttgccg tcacc
395

```

<210> 2310

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2310

```

Met Gly Pro Cys Ser Glu His Ile Pro Met Arg Ala Ala Cys Pro Val
1      5      10      15
His Ser Leu Pro Trp Ala Ala Gly Pro Asp Trp Val Pro Thr Ser Ser
20      25      30
Tyr Pro Leu Gly Ser Phe Pro Ala Gly Thr Gly Ile Pro His Gly Gly
35      40      45
Gly Arg Ala His Pro Ser Val Leu Gly Asp Gly Leu Ser Cys Ala Arg
50      55      60
Pro Pro Leu Pro Ser Cys Ser Gln Ala Pro Gln Gly Pro Ser Ser Pro
65      70      75      80
Ser Val Trp Arg Ser Gly Ser Ser Leu Glu Ser Pro Pro Arg Pro Arg
85      90      95
Asp Ser Thr His Thr Val Pro Ser Gly Leu Cys Gly
100      105

```

<210> 2311

<211> 378

<212> DNA

<213> Homo sapiens

```

<400> 2311
gtgcacgccc agatgctgcc gcaagacaag cagcgtgtcg tcggcgagtt gaagcgccag
60
ggctttctcag tgatcaaggt cggcgatggc atcaatgatt gcgacgctct cggcgcggcg
120
gatgtcggca gtcccatggg cggcagcgcg gacgtggctc tcgaaacggc cgatgctgcc
180
gtccttcacg gacgggtggg ggacgtcttc gcgatgatcg ccctatcgaa gcgaaccatg
240
gccaaacattc gacagaacat cgcgatcgcg atcgggctaa aggcggtgtt ccttctaacc
300
accgtcgtcg gcatcacggg gctttggcct gcaatcctcg cggatacggg gaccacggag
360
cttgtgacca tgaacgcg
378

```

```

<210> 2312
<211> 126
<212> PRT
<213> Homo sapiens

```

```

<400> 2312
Val His Ala Glu Met Leu Pro Gln Asp Lys Gln Arg Val Val Gly Glu
1      5      10      15
Leu Lys Arg Gln Gly Phe Ser Val Ile Lys Val Gly Asp Gly Ile Asn
20     25     30
Asp Cys Asp Ala Leu Ala Ala Ala Asp Val Gly Ser Pro Met Gly Gly
35     40     45
Ser Ala Asp Val Ala Leu Glu Thr Ala Asp Ala Ala Val Leu His Gly
50     55     60
Arg Val Gly Asp Val Phe Ala Met Ile Ala Leu Ser Lys Arg Thr Met
65     70     75     80
Ala Asn Ile Arg Gln Asn Ile Ala Ile Ala Ile Gly Leu Lys Ala Val
85     90     95
Phe Leu Val Thr Thr Val Val Gly Ile Thr Gly Leu Trp Pro Ala Ile
100    105    110
Leu Ala Asp Thr Gly Thr Thr Glu Leu Val Thr Met Asn Ala
115    120    125

```

```

<210> 2313
<211> 669
<212> DNA
<213> Homo sapiens

```

```

<400> 2313
ctagtggcat ggtctcgtcg gtcttttagtg gagcataccg acacatcggt gactcaaacg
60
atccgaatca tggtcgttcc tggttggcct ggaaccatta acgtacgcct caccatcgc
120
ttaagcgacg ccggtctagc tgtcgaagtc accgcgcgca atgtcggtag gacagcggg
180
ccgcttgatg acgcagcaca cccctatctc tgtctgggtg gcaccatcga cgactggaga
240

```

gtcgacgccc cgtttacctc gtggttacag gtcgatgac ggctgctacc aatgcagatg
 300
 cgcgagatgg acagcatcca cgcgctgaac ggtctcacgg gcggacagcg caccttcgat
 360
 accgcttaca ccgtagaagg aggcggaac cgtcggatcg cccgatggc gtatccgggt
 420
 ctcaacgggt aaacgagcca cgaattgtgg ggcgacgccg cgatgagctg ggtgcaagtc
 480
 tacactccag acgaccgcca cagtctggcc atcgagccaa tgacctgcgg cccagatgca
 540
 tttaatgagg gcccgaccca cggtgacgtc attcgactgg agcccggtaa tgacgtcaca
 600
 ctgcactggg gcacgccta acccgcgga gtcgaaagg acaaggacgg gaaggcagga
 660
 ttcacgcgt
 669

<210> 2314

<211> 206

<212> PRT

<213> Homo sapiens

<400> 2314

Leu	Val	Ala	Trp	Ser	Arg	Trp	Ser	Leu	Val	Glu	His	Thr	Asp	Thr	Ser
1				5					10					15	
Val	Thr	Gln	Thr	Ile	Arg	Ile	Met	Ala	Arg	Pro	Gly	Trp	Pro	Gly	Thr
			20					25					30		
Ile	Asn	Val	Arg	Leu	Thr	His	Arg	Leu	Ser	Asp	Ala	Gly	Leu	Ala	Val
	35						40					45			
Glu	Val	Thr	Ala	Arg	Asn	Val	Gly	Thr	Thr	Ala	Gly	Pro	Leu	Gly	Tyr
	50				55						60				
Ala	Ala	His	Pro	Tyr	Leu	Cys	Leu	Gly	Gly	Thr	Ile	Asp	Asp	Trp	Thr
65					70					75				80	
Val	Asp	Ala	Pro	Phe	Thr	Ser	Trp	Leu	Gln	Val	Asp	Asp	Arg	Leu	Leu
				85				90						95	
Pro	Met	Gln	Met	Arg	Glu	Met	Asp	Ser	Ile	His	Ala	Leu	Asn	Gly	Leu
			100				105						110		
Thr	Gly	Gly	Gln	Arg	Thr	Phe	Asp	Thr	Ala	Tyr	Thr	Val	Lys	Gly	Gly
		115					120					125			
Arg	Asn	Arg	Arg	Ile	Ala	Arg	Met	Ala	Tyr	Pro	Gly	Leu	Asn	Gly	Glu
	130				135						140				
Thr	Ser	His	Glu	Leu	Trp	Gly	Asp	Ala	Ala	Met	Ser	Trp	Val	Gln	Val
145				150					155					160	
Tyr	Thr	Pro	Asp	Asp	Arg	His	Ser	Leu	Ala	Ile	Glu	Pro	Met	Thr	Cys
			165					170					175		
Gly	Pro	Asp	Ala	Phe	Asn	Glu	Gly	Pro	Thr	His	Gly	Asp	Val	Ile	Arg
		180					185						190		
Leu	Glu	Pro	Gly	Asn	Asp	Val	Thr	Leu	His	Trp	Gly	Ile	Ala		
	195					200						205			

<210> 2315

<211> 546

<212> DNA

<213> Homo sapiens

<400> 2315
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 60
 acccaaggcc gaccaattcg catcgataag gcggtcgctt atcacacttc tcgcggcggtg
 120
 ccggtacatg aactgtttga ccgagtgcgc cgcagcttag accgagtgcg tgaacagggg
 180
 cacaacgtct actacgacga acagcgtgca tggcttgacg attactgggc aacggctgat
 240
 gttgaggtcg aggggtgcccc gaccggtatt cagcaggctg tcagggtgaa ccttttccag
 300
 attgctcagg catcagcccg tgcagatcaa cttggcattc cggcaaaggg tgtaaccggg
 360
 tcaggctatg aaggccacta cttttgggac actgaggttt atgtcatccc gatgttgacc
 420
 tacactcatc caagaatcgc tgagaatgcy ctgagattcc ggggtgaatac ctttccgcaa
 480
 gctcgacgcc gggctaagga attgtctgaa cgaggcgccc ttttcccggt gcgaacaatc
 540
 accggg
 546

<210> 2316

<211> 182

<212> PRT

<213> Homo sapiens

<400> 2316

Xaa	Ala	Ser	Leu	Ile	Asp	Thr	Glu	Pro	Gly	Met	Gly	Lys	Arg	Val	Tyr
1			5						10					15	
Arg	Val	Glu	Ala	Thr	Gln	Gly	Arg	Pro	Ile	Arg	Ile	Asp	Lys	Ala	Val
		20					25						30		
Ala	Tyr	His	Thr	Ser	Arg	Gly	Val	Pro	Val	His	Glu	Leu	Phe	Asp	Arg
		35				40						45			
Val	Arg	Arg	Ser	Leu	Asp	Arg	Val	Arg	Glu	Gln	Gly	His	Asn	Val	Tyr
	50				55					60					
Tyr	Asp	Glu	Gln	Arg	Ala	Trp	Leu	Asp	Asp	Tyr	Trp	Ala	Thr	Ala	Asp
65				70					75					80	
Val	Glu	Val	Glu	Gly	Ala	Pro	Thr	Gly	Ile	Gln	Gln	Ala	Val	Arg	Trp
			85					90					95		
Asn	Leu	Phe	Gln	Ile	Ala	Gln	Ala	Ser	Ala	Arg	Ala	Asp	Gln	Leu	Gly
		100					105						110		
Ile	Pro	Ala	Lys	Gly	Val	Thr	Gly	Ser	Gly	Tyr	Glu	Gly	His	Tyr	Phe
		115				120						125			
Trp	Asp	Thr	Glu	Val	Tyr	Val	Ile	Pro	Met	Leu	Thr	Tyr	Thr	His	Pro
	130				135					140					
Arg	Ile	Ala	Glu	Asn	Ala	Leu	Arg	Phe	Arg	Val	Asn	Thr	Leu	Pro	Gln
145				150					155					160	
Ala	Arg	Arg	Arg	Ala	Lys	Glu	Leu	Ser	Glu	Arg	Gly	Ala	Leu	Phe	Pro
			165				170							175	
Trp	Arg	Thr	Ile	Thr	Gly										
			180												

<210> 2317

<211> 496

<212> DNA

<213> Homo sapiens

<400> 2317

gccggcgggc tcgggaacgg tcaactgacct gcagcaggca atggcggctc cggtttaatc
 60
 aggggttctgc acggagtttt ggatagtcgc tccagtcgcc actggcaagg cgcgaccagg
 120
 cagctgctga cgctgctgtg atgccgagga gatcggagac gattcgtggg tgcattctgcc
 180
 gggtcagttc gatcagcgcg gtcgttcgag cgcttcctga acgcagcccc tgcctggcgca
 240
 gacgtcggct gagtgggcct ggtgtgagat gcaaccccg attcctgcc ggaagagacc
 300
 atccctcggg tcggtgtctc gatgtgtcag cgagctcggc gatcgcattc ccgaggacct
 360
 cgggcagttc gattggctcg gctccgatgg tgagcttccc cggtcgtgat gtcacgtcga
 420
 cctgctcacg ggtgagcgcg acgatgagag tgaggtggag gccgtagagg agcacgagca
 480
 acccagcggc acgcgt
 496

<210> 2318

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2318

Met	Pro	Arg	Arg	Ser	Glu	Thr	Ile	Arg	Gly	Cys	Ile	Cys	Arg	Val	Ser
1				5					10				15		
Ser	Ile	Ser	Ala	Val	Val	Arg	Ala	Leu	Pro	Glu	Arg	Ser	Pro	Cys	Trp
			20					25					30		
Arg	Arg	Arg	Arg	Leu	Ser	Gly	Pro	Gly	Val	Arg	Cys	Asn	Pro	Gly	Phe
			35				40					45			
Leu	Pro	Gly	Lys	Ser	His	Pro	Ser	Gly	Arg	Cys	Leu	Asp	Val	Ser	Ala
			50			55					60				
Ser	Ser	Ala	Ile	Ala	Phe	Pro	Arg	Thr	Ser	Gly	Ser	Ser	Ile	Gly	Ser
			65			70				75				80	
Ala	Pro	Met	Val	Ser	Phe	Pro	Gly	Arg	Asp	Val	Thr	Ser	Thr	Cys	Ser
			85						90					95	
Arg	Val	Ser	Ala	Thr	Met	Arg	Val	Arg	Trp	Arg	Pro				
			100						105						

<210> 2319

<211> 1748

<212> DNA

<213> Homo sapiens

<400> 2319

ntgatcaagt ctcgggtctct ggattatacc ttgttctctc gaacttggat ctttctctgct
 60

gaatatactc aattccaaaa ttatgtgaaa gaattgaaga aaaaacggaa gcagaaaaact
120
tttatagtga aaccagctaa tgggtgcaatg ggtcatggga ttcttttgat aagaaatggt
180
gacaaacttc catctcagga tcatttgatt gttcaagaat acattgaaaa gcctttccta
240
atggaaggtt acaagtttga cttacgaatt tatattctgg ttacatcgtg tgatccacta
300
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840
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1620
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<210> 2320

<211> 532

<212> PRT

<213> Homo sapiens

<400> 2320

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Ile	Phe	Pro	Ala	Glu	Tyr	Thr	Gln	Phe	Gln	Asn	Tyr	Val	Lys	Glu	Leu
			20				25					30			
Lys	Lys	Lys	Arg	Lys	Gln	Lys	Thr	Phe	Ile	Val	Lys	Pro	Ala	Asn	Gly
		35					40					45			
Ala	Met	Gly	His	Gly	Ile	Ser	Leu	Ile	Arg	Asn	Gly	Asp	Lys	Leu	Pro
	50					55					60				
Ser	Gln	Asp	His	Leu	Ile	Val	Gln	Glu	Tyr	Ile	Glu	Lys	Pro	Phe	Leu
	65			70						75				80	
Met	Glu	Gly	Tyr	Lys	Phe	Asp	Leu	Arg	Ile	Tyr	Ile	Leu	Val	Thr	Ser
				85					90					95	
Cys	Asp	Pro	Leu	Lys	Ile	Phe	Leu	Tyr	His	Asp	Gly	Leu	Val	Arg	Met
		100						105					110		
Gly	Thr	Glu	Lys	Tyr	Ile	Pro	Pro	Asn	Glu	Ser	Asn	Leu	Thr	Gln	Leu
		115					120					125			
Tyr	Met	His	Leu	Thr	Asn	Tyr	Ser	Val	Asn	Lys	His	Asn	Glu	His	Phe
	130				135						140				
Glu	Arg	Asp	Glu	Thr	Glu	Asn	Lys	Gly	Ser	Lys	Arg	Ser	Ile	Lys	Trp
	145			150						155				160	
Phe	Thr	Glu	Phe	Leu	Gln	Ala	Asn	Gln	His	Asp	Val	Ala	Lys	Phe	Trp
			165						170					175	
Ser	Asp	Ile	Ser	Glu	Leu	Val	Val	Lys	Thr	Leu	Ile	Val	Ala	Glu	Pro
		180						185					190		
His	Val	Leu	His	Ala	Tyr	Arg	Met	Cys	Arg	Pro	Gly	Gln	Pro	Pro	Gly
		195					200					205			
Ser	Glu	Ser	Val	Cys	Phe	Glu	Val	Leu	Gly	Phe	Asp	Ile	Leu	Leu	Asp
	210			215						220					
Arg	Lys	Leu	Lys	Pro	Trp	Leu	Leu	Glu	Ile	Asn	Arg	Ala	Pro	Ser	Phe
				230						235				240	
Gly	Thr	Asp	Gln	Lys	Ile	Asp	Tyr	Asp	Val	Lys	Arg	Gly	Val	Leu	Leu
			245						250					255	
Asn	Ala	Leu	Lys	Leu	Leu	Asn	Ile	Arg	Thr	Ser	Asp	Lys	Arg	Arg	Asn
		260					265						270		
Leu	Ala	Lys	Gln	Lys	Ala	Glu	Ala	Gln	Arg	Arg	Leu	Tyr	Gly	Gln	Asn
	275					280						285			
Ser	Ile	Lys	Arg	Leu	Leu	Pro	Gly	Ser	Ser	Asp	Trp	Glu	Gln	Gln	Arg
	290				295					300					
His	Gln	Leu	Glu	Arg	Arg	Lys	Glu	Glu	Leu	Lys	Glu	Arg	Leu	Ala	Gln
	305			310						315				320	
Val	Arg	Lys	Gln	Ile	Ser	Arg	Glu	Glu	His	Glu	Asn	Arg	His	Met	Gly
			325						330					335	
Asn	Tyr	Arg	Arg	Ile	Tyr	Pro	Pro	Glu	Asp	Lys	Ala	Leu	Leu	Glu	Lys

```

          340          345          350
Tyr Glu Asn Leu Leu Ala Val Ala Phe Gln Thr Phe Leu Ser Gly Arg
      355          360          365
Ala Ala Ser Phe Gln Arg Glu Leu Asn Asn Pro Leu Lys Arg Met Lys
      370          375          380
Glu Glu Asp Ile Leu Asp Leu Leu Glu Gln Cys Glu Ile Asp Asp Glu
      385          390          395          400
Lys Leu Met Gly Lys Thr Thr Lys Thr Arg Gly Pro Lys Pro Leu Cys
          405          410          415
Ser Met Pro Glu Ser Thr Glu Ile Met Lys Arg Pro Lys Tyr Cys Ser
          420          425          430
Ser Asp Ser Ser Tyr Asp Ser Ser Ser Ser Ser Ser Glu Ser Asp Glu
          435          440          445
Asn Glu Lys Glu Glu Tyr Gln Asn Lys Lys Arg Glu Lys Gln Val Thr
          450          455          460
Tyr Asn Leu Lys Pro Ser Asn His Tyr Lys Leu Ile Gln Gln Pro Ser
      465          470          475          480
Ser Ile Arg Arg Ser Val Ser Cys Pro Arg Ser Ile Ser Ala Gln Ser
          485          490          495
Pro Ser Ser Gly Asp Thr Arg Pro Phe Ser Ala Gln Gln Met Ile Ser
          500          505          510
Val Ser Arg Pro Thr Ser Ala Ser Arg Ser His Ser Leu Asn Pro Gly
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Leu Pro Pro Thr
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<210> 2321

<211> 433

<212> DNA

<213> Homo sapiens

<400> 2321

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120
acaggtcata atggcaggta acagaccatt tattgaagtg ctgaaacaaa tagaaaaaaa
180
agtccaggac accatcacag agcagtaact ccctgtgtgag atactctcag ctaagtaaga
240
attgagtgag acaacaataa aacaataacc catagggttt tcaaacagta acaaccgcgt
300
cagggttagc agcattttcta gaccttgatg gtaaaatgat gttctcaacc tttgctttca
360
gacactggat cactgcttaa gtagecctta tcttttcccc ctaatttttg ttgaagatgc
420
cagaggtgga gtg
433

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<210> 2322

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2322

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Met Leu Leu Thr Leu Ser Gly Leu Leu Leu Phe Glu Lys Pro Met Gly
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Ile Cys Phe Ile Val Val Ser Leu Asn Ser Tyr Leu Ala Glu Ser Ile
          20           25           30
Ser Gln Gly Lys Tyr Cys Ser Val Met Val Ser Trp Thr Leu Phe Ser
          35           40           45
Ile Cys Phe Ser Thr Ser Ile Asn Gly Leu Leu Pro Ala Ile Met Thr
          50           55           60
Cys Met His Leu Leu Ser Ser Phe Ser Lys Gln Lys Lys Leu Cys Gly
65          70          75          80
Cys Ile Ser Arg Thr Leu Asn His Phe Gln Asp Ser Ile Glu Leu Glu
          85          90          95
Thr His Ile Asp Thr Ser Thr Gln Leu
          100          105

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<210> 2323

<211> 532

<212> DNA

<213> Homo sapiens

<400> 2323

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tcctccactg tgcacccctt tggaaaaaaa gcggaggggg catcaagtaa aagtttcttg
120
ccaggcagag ccagctcggc ggccccccgc acatagctgg ggtagcagg ggttgcttct
180
ctgccgggca cagcgtcttc caggagccag ccggggagag ctgagccaag gccgaaggag
240
ccgcctgcgg gcttagccgc cccctcccgc ccgttgcccc cagagcggac gctgggacgc
300
ccggggtctg gcagctctgc gcccggttag gagcgggcgg gcgagcatta gcctgcgtcc
360
tggagaaggg gcgcagcgcc gcagttgagg ccgaagcagc ccttcgcggg cgtaggatac
420
ctgtcagtga gcgccgggat tgcacggccc ccgggtagtg cctgccggcg aggggaggga
480
gctcggggtga ctggccatc cccatccccg gccaggcccc ggagggcggc cg
532

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<210> 2324

<211> 51

<212> PRT

<213> Homo sapiens

<400> 2324

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Thr Arg Gln Asn Trp Gln Ser Trp Arg Leu Arg Gly Arg Gly Lys Trp
 1           5           10           15
Thr Trp Arg Pro Ser Ser Thr Val His Pro Leu Gly Lys Lys Ala Glu
          20           25           30
Gly Ala Ser Ser Lys Ser Phe Leu Pro Gly Arg Ala Ser Ser Ala Ala
          35           40           45
Pro Arg Thr

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50

<210> 2325

<211> 459

<212> DNA

<213> Homo sapiens

<400> 2325

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 120
 ccccgaagg gccgcattat tcccgagacc gatgctgatg tgggtggtgtg ggaccagaa
 180
 gccacaaaga ccattctcagc cagcacgcag gtccaggag gagacttcaa cctgtatgag
 240
 aacatgcgt gccacggcgt gccactggtc accatcagcc gggggcgcgt cgtgtatgag
 300
 aacggcgtct tcatgtgcgc cgagggcacc ggcaagttct gtcccctgag gtccttccca
 360
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 420
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<210> 2326

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2326

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Gly	Gly	Lys	Met	Asp	Glu	Asn	Arg	Phe	Val	Ala	Val	Thr	Ser	Ser	Asn
			20					25					30		
Ala	Ala	Lys	Leu	Leu	Asn	Leu	Tyr	Pro	Arg	Lys	Gly	Arg	Ile	Ile	Pro
		35				40					45				
Gly	Ala	Asp	Ala	Asp	Val	Val	Val	Trp	Asp	Pro	Glu	Ala	Thr	Lys	Thr
	50				55					60					
Ile	Ser	Ala	Ser	Thr	Gln	Val	Gln	Gly	Gly	Asp	Phe	Asn	Leu	Tyr	Glu
65					70				75					80	
Asn	Met	Arg	Cys	His	Gly	Val	Pro	Leu	Val	Thr	Ile	Ser	Arg	Gly	Arg
			85					90						95	
Val	Val	Tyr	Glu	Asn	Gly	Val	Phe	Met	Cys	Ala	Glu	Gly	Thr	Gly	Lys
			100					105					110		
Phe	Cys	Pro	Leu	Arg	Ser	Phe	Pro	Asp	Thr	Val	Tyr	Lys	Lys	Leu	Val
		115					120					125			
Gln	Arg	Glu	Lys	Thr	Leu	Lys	Val	Arg	Gly	Val	Ala	Arg	Thr	Pro	Tyr
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Leu	Gly	Asp	Val	Ala	Val	Val	Val	His							
145					150										

<210> 2327

<211> 599

<212> DNA

<213> Homo sapiens

<400> 2327

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 180
 gactttctcg agcttttcaa ggagagagcc acagccccct tctttgtatt tcagggtgttc
 240
 tgtgtggggc tctgggtgcct ggatgagtac tgggtactaca gcgtctttac gctatccatg
 300
 ctggtggcgt tcgaggcctc gctgggtcag cagcagatgc ggaacatgct ggagatccgg
 360
 aagatgggca acaagcccca catgatccag gtctaccgaa gccgcaagtg gaggcccat
 420
 gccatgatg agatcgtacc aggggacatc gtctccatcg gtgaggccgg gttccgctca
 480
 gtcccagtgg gagccccagc ctcagggcct ctggccaacc ctctctgcctc tgccctgcag
 540
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 599

<210> 2328

<211> 199

<212> PRT

<213> Homo sapiens

<400> 2328

Glu Phe Gln Lys Ile Lys Tyr Ser Tyr Asp Ala Leu Glu Lys Lys Gln
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 Phe Leu Pro Val Ala Phe Pro Val Gly Asn Ala Phe Ser Tyr Tyr Gln
 20 25 30
 Ser Asn Arg Gly Phe Gln Glu Asp Ser Glu Ile Arg Ala Ala Glu Lys
 35 40 45
 Lys Phe Gly Ser Asn Lys Ala Glu Met Val Val Pro Asp Phe Ser Glu
 50 55 60
 Leu Phe Lys Glu Arg Ala Thr Ala Pro Phe Phe Val Phe Gln Val Phe
 65 70 75 80
 Cys Val Gly Leu Trp Cys Leu Asp Glu Tyr Trp Tyr Tyr Ser Val Phe
 85 90 95
 Thr Leu Ser Met Leu Val Ala Phe Glu Ala Ser Leu Val Gln Gln
 100 105 110
 Met Arg Asn Met Ser Glu Ile Arg Lys Met Gly Asn Lys Pro His Met
 115 120 125
 Ile Gln Val Tyr Arg Ser Arg Lys Trp Arg Pro Ile Ala Ser Asp Glu
 130 135 140
 Ile Val Pro Gly Asp Ile Val Ser Ile Gly Glu Ala Gly Phe Arg Ser
 145 150 155 160
 Val Pro Val Gly Ala Pro Ala Ser Gly Pro Leu Ala Asn Pro Pro Ala
 165 170 175
 Ser Ala Leu Gln Ala Ala Pro His Arg Arg Thr Trp Cys His Val Thr

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                180                185                190
Cys Phe Cys Cys Glu Ala Ala
    195

<210> 2329
<211> 392
<212> DNA
<213> Homo sapiens

<400> 2329
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120
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180
agtgcctccc gggttgtcca tcatcatgcg acgagatttc gcctggcggt gcaggccttc
240
attgtcgtcg tcattggtgg tttgttgtag gcgttgacgg ccgacgcctt ccagttatcg
300
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392

<210> 2330
<211> 90
<212> PRT
<213> Homo sapiens

<400> 2330
Met Ser Thr Gln Pro Thr Glu Glu Pro Leu Arg Leu Val Val Ala Phe
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Asn Pro Val Pro Ser Ala Ser Arg Val Ala His His His Ala Thr Arg
20     25     30
Phe Arg Leu Ala Val Gln Ala Phe Ile Val Val Val Ile Gly Gly Leu
35     40     45
Leu Trp Ala Leu Thr Ala Asp Ala Phe Gln Leu Ser Thr Val Met Trp
50     55     60
Met Leu Gly Ala Trp Val Val Leu Phe Leu Val Leu Phe Val Ile Gln
65     70     75     80
Asn Leu Arg Leu His Ala Ala Arg Lys Asp
85     90

<210> 2331
<211> 2813
<212> DNA
<213> Homo sapiens

<400> 2331
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gatttaaggt gcccgagtcc acgctgatgg actgccgtag acaactgaaa gacagtaagc
120

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aaatTTtate tattacaaag aactTTtaag ttgagaatat tggacctctt cctataactg
180
tttcgtctct gaaaattaat gggataaact gccaagggtta tggattcgag gtgctggatt
240
gggattcagt ttccccgga cccaaacaca tcccgcgata tcagcattgt gttcactcca
300
gactttaact cctcctgggt aattcgggac ctaagtcttg taaccgcagc ggacctagaa
360
tttcgcttca ctctcaatgt gactctccct catcacctgt tgccttctgtg tgcagacgtg
420
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480
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540
atgaaaacaa gacagaggca aaatgctagc tcctcttcac agcaaaacaa tggctctatg
600
gatgtaata gccccattc ttacaaaagc aattgcaaga actttctcga tacatatggc
660
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720
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780
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840
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960
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1020
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1080
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1200
aactcacctc agtaccacca gccagacttg ccagaaattt ccaggaaaaa taatgggaat
1260
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1320
acaaagcctt cttcagaaaa gaagattcac aaaacatcta gagaagacat gttttctgag
1380
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1440
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1500
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1620
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1680
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1740

tccgattcca gctctgactg tgggagctcc tctggcagcg tgcgtgccag ccggggcagc
 1800
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 1860
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 1920
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 1980
 tacgcagagc cttcctgtcc cagccttccct gccggggccca caggtgttga agaagataaa
 2040
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 2100
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 2160
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 2220
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 2280
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 2340
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 2400
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 2460
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 2520
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 2580
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 2700
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<210> 2332

<211> 789

<212> PRT

<213> Homo sapiens

<400> 2332

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 20 25 30
 His Leu Leu Pro Leu Cys Ala Asp Val Val Pro Gly Pro Ser Trp Glu
 35 40 45
 Glu Ser Phe Trp Arg Leu Thr Val Phe Phe Val Ser Leu Ser Leu Leu
 50 55 60
 Gly Val Ile Leu Ile Ala Phe Gln Gln Ala Gln Tyr Ile Leu Met Glu
 65 70 75 80
 Phe Met Lys Thr Arg Gln Arg Gln Asn Ala Ser Ser Ser Ser Gln Gln

85										90										95									
Asn	Asn	Gly	Pro	Met	Asp	Val	Ile	Ser	Pro	His	Ser	Tyr	Lys	Lys	Ser	Asn													
100										105										110									
Cys	Lys	Asn	Phe	Leu	Asp	Thr	Tyr	Gly	Pro	Ser	Asp	Lys	Gly	Arg	Gly														
115										120										125									
Lys	Asn	Cys	Leu	Pro	Val	Asn	Thr	Pro	Gln	Ser	Arg	Ile	Gln	Asn	Ala														
130										135										140									
Ala	Lys	Arg	Ser	Pro	Ala	Thr	Tyr	Gly	His	Ser	Gln	Lys	Lys	His	Lys														
145										150										155									
Cys	Ser	Val	Tyr	Tyr	Ser	Lys	His	Lys	Thr	Ser	Thr	Ala	Ala	Ala	Ala														
165										170										175									
Ser	Ser	Thr	Ser	Thr	Thr	Glu	Glu	Lys	Gln	Thr	Ser	Pro	Leu	Gly	Ser														
180										185										190									
Ser	Leu	Pro	Ala	Ala	Lys	Glu	Asp	Ile	Cys	Thr	Asp	Ala	Met	Arg	Glu														
195										200										205									
Asn	Trp	Ile	Ser	Leu	Arg	Tyr	Ala	Ser	Gly	Ile	Asn	Val	Asn	Leu	Gln														
210										215										220									
Lys	Asn	Leu	Thr																										

```

      515                      520                      525
Asp Ser Val Ser Gln Asn Asp Phe Pro Ser Glu Ala Pro Ile Ser Leu
  530                      535                      540
Asn Leu Ser His Asn Ile Cys Asn Pro Met Thr Val Asn Ser Leu Pro
  545                      550                      555                      560
Gln Tyr Ala Glu Pro Ser Cys Pro Ser Leu Pro Ala Gly Pro Thr Gly
      565                      570                      575
Val Glu Glu Asp Lys Gly Leu Tyr Ser Pro Gly Asp Leu Trp Pro Thr
      580                      585                      590
Pro Pro Val Cys Val Thr Ser Ser Leu Asn Cys Thr Leu Glu Asn Gly
      595                      600                      605
Val Pro Cys Val Ile Gln Glu Ser Ala Pro Val His Asn Ser Phe Ile
      610                      615                      620
Asp Trp Ser Ala Thr Cys Glu Gly Gln Phe Ser Ser Ala Tyr Cys Pro
      625                      630                      635                      640
Leu Glu Leu Asn Asp Tyr Asn Ala Phe Pro Glu Glu Asn Met Asn Tyr
      645                      650                      655
Ala Asn Gly Phe Pro Cys Pro Ala Asp Val Gln Thr Asp Phe Ile Asp
      660                      665                      670
His Asn Ser Gln Ser Thr Trp Asn Thr Pro Pro Asn Met Pro Ala Ala
      675                      680                      685
Trp Gly His Ala Ser Phe Ile Ser Ser Pro Pro Tyr Leu Thr Ser Thr
      690                      695                      700
Arg Ser Leu Ser Pro Met Ser Gly Leu Phe Gly Ser Ile Trp Ala Pro
      705                      710                      715                      720
Gln Ser Asp Val Tyr Glu Asn Cys Cys Pro Ile Asn Pro Thr Thr Glu
      725                      730                      735
His Ser Thr His Met Glu Asn Gln Ala Val Val Cys Lys Glu Tyr Tyr
      740                      745                      750
Pro Gly Phe Asn Pro Phe Arg Ala Tyr Met Asn Leu Asp Ile Trp Thr
      755                      760                      765
Thr Thr Ala Asn Arg Asn Ala Asn Phe Pro Leu Ser Arg Asp Ser Ser
      770                      775                      780
Tyr Cys Gly Asn Val
785

```

<210> 2333

<211> 501

<212> DNA

<213> Homo sapiens

<400> 2333

```

cgtatgattg gtgtgggaca aatactattc aacaagagta cctaatacat tgtttaaggc
60
gaagtaataa atatgaatgg ggtgtatcat ataatgaaca acgaatatcc atatatgca
120
gacgaagttc ttcacaaagc aaaatcatat ttgtcagcag atgaatatga gtatgtttta
180
aaaagctatc atattgctta tgaagcacat aaaggtcagt tccgaaaaaa cggattacca
240
tacattatgc atcctataca agttgcaggt attttaacag aaatgcgatt agacggaccg
300
acgattgtcg cagggttttt gcatgatgta attgaagata caccgtatac atttgaagat
360

```

gtaaaagaaa tgttcaatga agaagttgct cgaattgttg atgggtgtgac gaagcttaaa
 420
 aaaataaaat accgctcaaa agaagaacaa caagctgaaa atcatcgcaa gttatttatt
 480
 gcgattgcc aagatgtacg c
 501

<210> 2334
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 2334
 Met Asn Gly Val Tyr His Ile Met Asn Asn Glu Tyr Pro Tyr Ser Ala
 1 5 10 15
 Asp Glu Val Leu His Lys Ala Lys Ser Tyr Leu Ser Ala Asp Glu Tyr
 20 25 30
 Glu Tyr Val Leu Lys Ser Tyr His Ile Ala Tyr Glu Ala His Lys Gly
 35 40 45
 Gln Phe Arg Lys Asn Gly Leu Pro Tyr Ile Met His Pro Ile Gln Val
 50 55 60
 Ala Gly Ile Leu Thr Glu Met Arg Leu Asp Gly Pro Thr Ile Val Ala
 65 70 75 80
 Gly Phe Leu His Asp Val Ile Glu Asp Thr Pro Tyr Thr Phe Glu Asp
 85 90 95
 Val Lys Glu Met Phe Asn Glu Glu Val Ala Arg Ile Val Asp Gly Val
 100 105 110
 Thr Lys Leu Lys Lys Ile Lys Tyr Arg Ser Lys Glu Glu Gln Gln Ala
 115 120 125
 Glu Asn His Arg Lys Leu Phe Ile Ala Ile Ala Lys Asp Val Arg
 130 135 140

<210> 2335
 <211> 387
 <212> DNA
 <213> Homo sapiens

<400> 2335
 ggatcctgag cgtggggact tctttgcact ccacagaacc ctcacttgta cctctacttt
 60
 tctctgcaga tggaccacac agcattcccc tgtgggtgct gcagggaggg ctgtgagaac
 120
 cccatgggcc gtgtggaatt taatcaggca agagttcaga cccatttcat ccacacactc
 180
 acccgctgc agttggaaca ggaggtgag agctttaggg agctggaggc cctgtccca
 240
 ggcagccccc ccagccctgg tgaggaggcc ctggtcccta ctttcccact ggccaaggcc
 300
 cccatgaaca atgagctggg agacaacagc tgcagcagcg acatgactga ttcttccaca
 360
 gcattcttcat cagcatcggg cactagt
 387

<210> 2336

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2336

```

Met Asp His Thr Ala Phe Pro Cys Gly Cys Cys Arg Glu Gly Cys Glu
 1           5           10           15
Asn Pro Met Gly Arg Val Glu Phe Asn Gln Ala Arg Val Gln Thr His
           20           25           30
Phe Ile His Thr Leu Thr Arg Leu Gln Leu Glu Gln Glu Ala Glu Ser
 35           40           45
Phe Arg Glu Leu Glu Ala Pro Ala Gln Gly Ser Pro Pro Ser Pro Gly
 50           55           60
Glu Glu Ala Leu Val Pro Thr Phe Pro Leu Ala Lys Pro Pro Met Asn
65           70           75           80
Asn Glu Leu Gly Asp Asn Ser Cys Ser Ser Asp Met Thr Asp Ser Ser
           85           90           95
Thr Ala Ser Ser Ser Ala Ser Gly Thr Ser
100           105

```

<210> 2337

<211> 359

<212> DNA

<213> Homo sapiens

<400> 2337

```

ngagaagagg aggagtcac gccagggggc gccatctcca ggctcgcca agccgctggg
60
accatgtgca gctcaagaat ggctccggc ccatcgccct cggggcaggg gaagggcagc
120
ttctctgcac cagcttcct gctgggtcc agggcccca ggctgaggcc gggggcccg
180
gggtcaatgc caggcaccct gctattgagg aacctatcca ggaggaagga ctcgggcaga
240
cctgcgggat cctcgtctc ccacgggtcc tcattggcaga agcagaagga gctggagtcg
300
ctgaggtccg tgggcaggcg ggctggggcc aacgtggggg caccgacctc ctcaaagct
359

```

<210> 2338

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2338

```

Met Cys Ser Ser Arg Met Ala Ser Gly Pro Ser Ala Ser Gly Gln Gly
 1           5           10           15
Lys Gly Ser Phe Ser Ala Pro Ala Ser Leu Leu Gly Ser Arg Ala His
           20           25           30
Arg Leu Arg Pro Gly Ala Gln Gly Ser Met Pro Gly Thr Leu Leu Leu
 35           40           45
Arg Asn Leu Ser Arg Arg Lys Asp Ser Gly Arg Pro Ala Gly Ser Ser
 50           55           60
Ser Ser His Gly Ser Ser Trp Gln Lys Gln Lys Glu Leu Glu Ser Leu

```

```

65              70              75              80
Arg Ser Val Gly Arg Arg Ala Gly Pro Asn Val Gly Ser Pro Thr Ser
              85              90              95
Ser Lys

```

```

<210> 2339
<211> 439
<212> DNA
<213> Homo sapiens

```

```

<400> 2339
acgcgtggcg tcagtcagg cagacttggg aggtcgccta caccgtcaac tcggttgcca
60
ccctgtcttc caccttcgtc gtgcgagtcg tcagtgctct gtggtttggt cccctcgggc
120
actgggtccc gtagggtctg taatgctggg gcgctcggcg cgatgtgccca gttccttggt
180
gagttactcc tctacactgg tgtgaacaag accggagaat tccccccat attctcgttt
240
cccgtctcgc ccgcacgtca ttgggactgg cttttacgcg gtagtggttg ccgtactctg
300
gttgctctgc ggcacggctg gcagggggat catgtcatga gtccgacggt gagcgagcgg
360
cgtcttagcg cgccaatgcg acgtggcatc gtggcactgt gcgtggcgat ggccttcgtg
420
ttgtcggggg gcggtgctg
439

```

```

<210> 2340
<211> 92
<212> PRT
<213> Homo sapiens

```

```

<400> 2340
Met Cys Gln Phe Leu Gly Glu Leu Leu Tyr Thr Gly Val Asn Lys
1              5              10              15
Thr Gly Glu Phe Pro Pro Ile Phe Ser Phe Pro Ala Arg Pro Ala Arg
20              25              30
His Trp Asp Trp Leu Leu Arg Gly Ser Gly Cys Arg Thr Leu Val Ala
35              40              45
Leu Arg His Gly Arg Gln Gly Asp His Val Met Ser Pro Thr Val Ser
50              55              60
Glu Arg Arg Leu Ser Ala Pro Met Arg Arg Gly Ile Val Ala Leu Cys
65              70              75              80
Val Ala Met Ala Phe Val Leu Ser Gly Cys Gly Ala
              85              90

```

```

<210> 2341
<211> 411
<212> DNA
<213> Homo sapiens

```

```

<400> 2341

```

gccaacctc ccctccatcc tgcccaagat ggatcttgct gagcctccct ggcatatgcc
 60
 tctgcaggag gagccagagg aggtcacgga ggaggaggag gaaagggag aagaggagag
 120
 ggagaaggaa gcagaggagg agggaggaaga ggaagagctg ctctgtgtgag cgggtcccca
 180
 ggagccaccg cacaggccca tgcccttca cctagcacca gcagcagcac cagcagccag
 240
 agtcctgggg ccaccggca caggcaggag gattctggag accaggccac atcaggcnat
 300
 ggaagtggag agcagtgtga aaccacctt gtcagtgcc tcagtcacc caagtacagt
 360
 ggccccgggg gttcagaact atagccagga gtctgggggc actgagtggc n
 411

<210> 2342

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2342

Ala	Ser	Leu	Ala	Tyr	Ala	Ser	Ala	Gly	Gly	Ala	Arg	Gly	Gly	His	Gly
1				5						10				15	
Gly	Gly	Gly	Gly	Lys	Gly	Arg	Arg	Gly	Glu	Gly	Glu	Gly	Ser	Arg	Gly
			20					25					30		
Gly	Gly	Gly	Arg	Gly	Arg	Ala	Ala	Pro	Val	Ser	Gly	Ser	Pro	Gly	Ala
			35				40					45			
Thr	Ala	Gln	Ala	His	Ala	Pro	Ser	Pro	Ser	Thr	Ser	Ser	Ser	Thr	Ser
	50					55				60					
Ser	Gln	Ser	Pro	Gly	Ala	Thr	Arg	His	Arg	Gln	Glu	Asp	Ser	Gly	Asp
				70						75				80	
Gln	Ala	Thr	Ser	Gly	Xaa	Gly	Ser	Gly	Glu	Gln	Cys	Glu	Thr	His	Leu
				85					90					95	
Val	Ser	Ala	Leu	Ser	His	Pro	Lys	Tyr	Ser	Gly	Pro	Gly	Gly	Ser	Glu
			100					105						110	

Leu

<210> 2343

<211> 522

<212> DNA

<213> Homo sapiens

<400> 2343

ggcccgcaga agatgctgat gccttcacag tttcccaacc agggccagca gggattctct
 60
 ggaggccagg gaccctacca agccatgtcc caggacatgg gcaataccca agacatgttc
 120
 agccctgac agagctcaat gcccatgagc aacgtgggca ccaccggct cagccacatg
 180
 cctctgcccc ctgcgtccaa tcctcctggg accgtgcatt cagcccaaaa cggggggcta
 240
 ggcaggcggc cttcggacct caccatcagt attaatcaga tgggctcacc gggcatgggg
 300

cacttgaagt cgccaccct tagccaggtg cactcaccctc tggtcacctc gccctctgcc
 360
 aaacctcaagt caccacagac tccctcacag atgggtgcctt tgccttctgc caaccgcga
 420
 ggacctctca agtcgcccc ggtcctcggc tctccctca gtgtccgttc acccaatggc
 480
 tcgcccagca ggctcaagtc tcttccatg gcggtgcctt ct
 522

<210> 2344
 <211> 174
 <212> PRT
 <213> Homo sapiens

<400> 2344
 Gly Pro Gln Lys Met Leu Met Pro Ser Gln Phe Pro Asn Gln Gly Gln
 1 5 10 15
 Gln Gly Phe Ser Gly Gly Gln Gly Pro Tyr Gln Ala Met Ser Gln Asp
 20 25 30
 Met Gly Asn Thr Gln Asp Met Phe Ser Pro Asp Gln Ser Ser Met Pro
 35 40 45
 Met Ser Asn Val Gly Thr Thr Arg Leu Ser His Met Pro Leu Pro Pro
 50 55 60
 Ala Ser Asn Pro Pro Gly Thr Val His Ser Ala Pro Asn Arg Gly Leu
 65 70 75 80
 Gly Arg Arg Pro Ser Asp Leu Thr Ile Ser Ile Asn Gln Met Gly Ser
 85 90 95
 Pro Gly Met Gly His Leu Lys Ser Pro Thr Leu Ser Gln Val His Ser
 100 105 110
 Pro Leu Val Thr Ser Pro Ser Ala Asn Leu Lys Ser Pro Gln Thr Pro
 115 120 125
 Ser Gln Met Val Pro Leu Pro Ser Ala Asn Pro Pro Gly Pro Leu Lys
 130 135 140
 Ser Pro Gln Val Leu Gly Ser Ser Leu Ser Val Arg Ser Pro Thr Gly
 145 150 155 160
 Ser Pro Ser Arg Leu Lys Ser Pro Ser Met Ala Val Pro Ser
 165 170

<210> 2345
 <211> 561
 <212> DNA
 <213> Homo sapiens

<400> 2345
 nagatctccg tcttgatctt gagcaccgag gcaactggggg gggaggacag cagccgcggg
 60
 ggccctccac agcccgcgtc caggccgcct gggctcgacg cgctggacag ggcggcgagg
 120
 ctggcgctgc cgcccttttg cggtttccgc cttttcttgc gcttctgggt cttgctggag
 180
 gcctgcgcgc ccgcctcgcc tgcgctgtcc gagtcttgg cgctgtcgga cgtgagtgac
 240
 tcgcagttct gcagccgacg gtccgactcg ctctccacca tagctattaa tgccaagaat
 300

gcaaatgaaa agaataatcat ctgggtgaat taccttctta gcaatcctga gtacaaggac
 360
 acacccatgg acatcgacaca gctcccccac ctgccggaga aaatttcgga atcctcgagg
 420
 acatccgact ctgagtcaga ctctaaagac acctcaggta ttacagagga caacgagaac
 480
 tccaagnntc cgacgagaag gggaaccagt ccgagaacag cgaagacccg gagcccgacc
 540
 ggaagaagtc gggaacgcg t
 561

<210> 2346

<211> 187

<212> PRT

<213> Homo sapiens

<400> 2346

Xaa	Ile	Ser	Val	Leu	Ile	Leu	Ser	Thr	Glu	Ala	Leu	Gly	Gly	Glu	Asp
1			5					10						15	
Ser	Ser	Arg	Gly	Gly	Leu	His	Gln	Pro	Ala	Ser	Arg	Pro	Pro	Gly	Leu
			20				25					30			
Asp	Ala	Leu	Asp	Arg	Arg	Arg	Arg	Leu	Ala	Leu	Pro	Pro	Phe	Cys	Arg
			35				40					45			
Phe	Arg	Leu	Phe	Leu	Arg	Phe	Trp	Cys	Leu	Leu	Glu	Ala	Cys	Ala	Pro
			50			55					60				
Ala	Ser	Pro	Ala	Leu	Ser	Glu	Ser	Leu	Ala	Leu	Ser	Asp	Val	Ser	Asp
65				70						75				80	
Ser	Gln	Phe	Cys	Ser	Arg	Arg	Ser	Asp	Ser	Leu	Ser	Thr	Ile	Ala	Ile
			85					90						95	
Asn	Ala	Lys	Asn	Ala	Asn	Glu	Lys	Asn	Ile	Ile	Trp	Val	Asn	Tyr	Leu
			100					105					110		
Leu	Ser	Asn	Pro	Glu	Tyr	Lys	Asp	Thr	Pro	Met	Asp	Ile	Ala	Gln	Leu
			115				120					125			
Pro	His	Leu	Pro	Glu	Lys	Thr	Ser	Glu	Ser	Ser	Glu	Thr	Ser	Asp	Ser
			130			135					140				
Glu	Ser	Asp	Ser	Lys	Asp	Thr	Ser	Gly	Ile	Thr	Glu	Asp	Asn	Glu	Asn
145				150						155				160	
Ser	Lys	Xaa	Pro	Thr	Arg	Arg	Gly	Thr	Ser	Pro	Arg	Thr	Ala	Lys	Thr
				165				170						175	
Arg	Ser	Pro	Thr	Gly	Arg	Ser	Arg	Ala	Thr	Arg					
			180					185							

<210> 2347

<211> 375

<212> DNA

<213> Homo sapiens

<400> 2347

atcagcgaag aacacggcag gaccctggaa gacgccgccg gtgaattgaa gcgtgggtatc
 60
 gagaacgtcg agtacgcctg cgccgcgccg gaagtactga aggggtgaata cagccgtaac
 120
 gtcggtccga acatcgacgc ctggtccgat ttccagcgcg tgggcgtggt ggcgggggac
 180

acgccattca acttcccggc gatggtgccc ctgtggatgt atccgttggc gatcgtttgc
 240
 ggtaactgct ttatcctcaa gccgtccgag cgtgatccga gctcgacctt gctgatccgc
 300
 cagctgttgc aggaagccgg ttgtcccaaa ggtgtgctga acgtggtgca tgggtgacaag
 360
 accgcggtgg acgcg
 375

<210> 2348

<211> 125

<212> PRT

<213> Homo sapiens

<400> 2348

Ile	Ser	Glu	Glu	His	Gly	Arg	Thr	Leu	Glu	Asp	Ala	Ala	Gly	Glu	Leu
1				5					10					15	
Lys	Arg	Gly	Ile	Glu	Asn	Val	Glu	Tyr	Ala	Cys	Ala	Ala	Pro	Glu	Val
			20				25						30		
Leu	Lys	Gly	Glu	Tyr	Ser	Arg	Asn	Val	Gly	Pro	Asn	Ile	Asp	Ala	Trp
		35					40				45				
Ser	Asp	Phe	Gln	Pro	Leu	Gly	Val	Val	Ala	Gly	Ile	Thr	Pro	Phe	Asn
	50					55					60				
Phe	Pro	Ala	Met	Val	Pro	Leu	Trp	Met	Tyr	Pro	Leu	Ala	Ile	Val	Cys
65					70				75					80	
Gly	Asn	Cys	Phe	Ile	Leu	Lys	Pro	Ser	Glu	Arg	Asp	Pro	Ser	Ser	Thr
			85						90				95		
Leu	Leu	Ile	Ala	Gln	Leu	Leu	Gln	Glu	Ala	Gly	Leu	Pro	Lys	Gly	Val
			100					105					110		
Leu	Asn	Val	Val	His	Gly	Asp	Lys	Thr	Ala	Val	Asp	Ala			
	115						120					125			

<210> 2349

<211> 417

<212> DNA

<213> Homo sapiens

<400> 2349

nnnaaaaaaa aaaaaaaa aaaaacacaa tatttaatgg acgcggttta ttcagcagggt
 60
 gctgacaaa tttttggtgt cccaggagat ttaatactag cctttttaga tgatattatt
 120
 gcacataatc atattaaatg gattggtaat acaaatgaac ttaatgcaag ttatgccgct
 180
 gacggatatg cacgtattaa tggcatcggg gcaatggtaa caacatttgg agtgggtgaa
 240
 ttaagtgtct tcaacggaat cgctggatct tatgctgagc gtgtaccagt tattgccatc
 300
 actggggcac ctactcgagc tgtagaacia gaaggcaaat acgttcacca ttccttggc
 360
 gaaggaaact ttgatgatta tagaaaaatg tttagacctt ttacaacagc gcaagct
 417

<210> 2350

<211> 139
 <212> PRT
 <213> Homo sapiens

<400> 2350

```

Xaa Lys Lys Lys Lys Lys Lys Thr Gln Tyr Leu Met Asp Ala Val
 1           5           10           15
Tyr Ser Ala Gly Ala Asp Lys Val Phe Gly Val Pro Gly Asp Phe Asn
      20           25           30
Leu Ala Phe Leu Asp Asp Ile Ile Ala His Asn His Ile Lys Trp Ile
 35           40           45
Gly Asn Thr Asn Glu Leu Asn Ala Ser Tyr Ala Ala Asp Gly Tyr Ala
 50           55           60
Arg Ile Asn Gly Ile Gly Ala Met Val Thr Thr Phe Gly Val Gly Glu
 65           70           75           80
Leu Ser Ala Val Asn Gly Ile Ala Gly Ser Tyr Ala Glu Arg Val Pro
      85           90           95
Val Ile Ala Ile Thr Gly Ala Pro Thr Arg Ala Val Glu Gln Glu Gly
 100          105          110
Lys Tyr Val His His Ser Leu Gly Glu Gly Thr Phe Asp Asp Tyr Arg
 115          120          125
Lys Met Phe Glu Pro Ile Thr Thr Ala Gln Ala
 130          135

```

<210> 2351
 <211> 696
 <212> DNA
 <213> Homo sapiens

<400> 2351

```

nacgcgttgc cgcgcgataa ctctggtgag ggtcttgctg gggccctgct ggccttgtt
 60
ggctccgccc agctgtgcga ccgttctctg atcaaccgacc agtatgaccg gttcgtgcgt
 120
ggcaatactg tgctcgctca gccgaatgat gccggcatga ttctgtattga cgacaacctc
 180
ggcatcgcgc tgtccttgga cgctaacgga cgccagacca ccttaaccc gtatcttggc
 240
gcccagctgg ctctttgcga ggcttacccg aatgtggctg tctctggcgc aactccgggt
 300
gctgtcactg attgcctcaa ttatggtccc ccgtacgata ccgatgtcat gtggcaattc
 360
gacgagacca tccttggtct ggttgacggc tgccgcgagc ttggcggtgcc ggttacgggc
 420
ggtaacggtt ccctgcacaa ccgcactgga gatgagtcga ttccggcctac tccgctcggt
 480
gggtgtgctcg gcgttattga tgacgtgcat cgtegcattc cgteggcctt cgcacacgac
 540
ggcgacgctg tcttgctgct aggaacgacg aagtgcgagt tcggcggatc ggtctatgag
 600
gacgtcatcc acgctggcca cctaggcggt atgccccga tgccccacct gaatgccgag
 660
aaggccctgg ccgcggtgat ggtggaagcg tcgaag
 696

```

<210> 2352

<211> 232

<212> PRT

<213> Homo sapiens

<400> 2352

```

Xaa Ala Leu Pro Arg Asp Asn Ser Gly Glu Gly Leu Ala Gly Ala Leu
 1           5           10           15
Leu Ala Leu Val Gly Ser Ala Gln Leu Cys Asp Arg Ser Trp Ile Thr
          20           25           30
Asp Gln Tyr Asp Arg Phe Val Arg Gly Asn Thr Val Leu Ala Gln Pro
          35           40           45
Asn Asp Ala Gly Met Ile Arg Ile Asp Asp Asn Leu Gly Ile Ala Leu
          50           55           60
Ser Leu Asp Ala Asn Gly Arg Gln Thr Thr Leu Asn Pro Tyr Leu Gly
65          70          75          80
Ala Gln Leu Ala Leu Cys Glu Ala Tyr Arg Asn Val Ala Val Ser Gly
          85          90          95
Ala Thr Pro Val Ala Val Thr Asp Cys Leu Asn Tyr Gly Ser Pro Tyr
          100          105          110
Asp Pro Asp Val Met Trp Gln Phe Asp Glu Thr Ile Leu Gly Leu Val
          115          120          125
Asp Gly Cys Arg Glu Leu Gly Val Pro Val Thr Gly Gly Asn Val Ser
          130          135          140
Leu His Asn Arg Thr Gly Asp Glu Ser Ile Arg Pro Thr Pro Leu Val
145          150          155          160
Gly Val Leu Gly Val Ile Asp Asp Val His Arg Arg Ile Pro Ser Ala
          165          170          175
Phe Ala His Asp Gly Asp Ala Val Leu Leu Leu Gly Thr Thr Lys Cys
          180          185          190
Glu Phe Gly Gly Ser Val Tyr Glu Asp Val Ile His Ala Gly His Leu
          195          200          205
Gly Gly Met Pro Pro Met Pro Asp Leu Asn Ala Glu Lys Ala Leu Ala
          210          215          220
Ala Val Met Val Glu Ala Ser Lys
225          230

```

<210> 2353

<211> 422

<212> DNA

<213> Homo sapiens

<400> 2353

```

nnagcaatct cagaagaatt gctggctgag ttttcaaact atggtgtcaa agtagtaccg
60
atttcagggtg atgtttcaga ctttgcagat gccaaagcgta tggtagatca agcgattaca
120
gaactcgggtt ctggtgatgt cttggtcaac aatgctggga tcaactcaaga tacgcttatg
180
ctcaagatga ccgaagaaga ctttgaaaaa gtgattaaga tcaacttgac aggtgccttc
240
aacatgacgc aagcagtcctt gaaacagatg atcaaggcac gtgaagggtgc gattatcaac
300

```

atgtctagtg ttggtcggttt gatgggaaat atcggaacaag ccaactatgc agcttctaaa
 360
 gcaggcttga ttggttttac caagtcagtt gcacgtgaag ttgccaatcg caacgtacgc
 420
 gt
 422

<210> 2354
 <211> 140
 <212> PRT
 <213> Homo sapiens

<400> 2354
 Xaa Ala Ile Ser Glu Glu Leu Leu Ala Glu Phe Ser Asn Tyr Gly Val
 1 5 10 15
 Lys Val Val Pro Ile Ser Gly Asp Val Ser Asp Phe Ala Asp Ala Lys
 20 25 30
 Arg Met Val Asp Gln Ala Ile Thr Glu Leu Gly Ser Val Asp Val Leu
 35 40 45
 Val Asn Asn Ala Gly Ile Thr Gln Asp Thr Leu Met Leu Lys Met Thr
 50 55 60
 Glu Glu Asp Phe Glu Lys Val Ile Lys Ile Asn Leu Thr Gly Ala Phe
 65 70 75 80
 Asn Met Thr Gln Ala Val Leu Lys Gln Met Ile Lys Ala Arg Glu Gly
 85 90 95
 Ala Ile Ile Asn Met Ser Ser Val Val Gly Leu Met Gly Asn Ile Gly
 100 105 110
 Gln Ala Asn Tyr Ala Ala Ser Lys Ala Gly Leu Ile Gly Phe Thr Lys
 115 120 125
 Ser Val Ala Arg Glu Val Ala Asn Arg Asn Val Arg
 130 135 140

<210> 2355
 <211> 5191
 <212> DNA
 <213> Homo sapiens

<400> 2355
 cttgccaagt ttgacggtga agtgatctgt gaacctccca acaacaaact ggacaaattc
 60
 agcggaaacc tctactggaa ggaaaaataag ttcctctga gcaaccagaa catgctgctg
 120
 cggggctgtg tgctgcgaaa caccgagtgg tgcttcgggc tggatcatctt tgcaggctct
 180
 gacactaagc tgatgcaaaa cagcggcaga acaaagttca aaagaacgag tatcgatcgc
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<210> 2356

<211> 1000

<212> PRT

<213> Homo sapiens

<400> 2356

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20          25          30
Leu Ser Asn Gln Asn Met Leu Leu Arg Gly Cys Val Leu Arg Asn Thr
35          40          45
Glu Trp Cys Phe Gly Leu Val Ile Phe Ala Gly Pro Asp Thr Lys Leu
50          55          60
Met Gln Asn Ser Gly Arg Thr Lys Phe Lys Arg Thr Ser Ile Asp Arg
65          70          75          80
Leu Met Asn Thr Leu Val Leu Trp Ile Phe Gly Phe Leu Val Cys Met
85          90          95
Gly Val Ile Leu Ala Ile Gly Asn Ala Ile Trp Glu His Glu Val Gly
100         105         110
Met Arg Phe Gln Val Tyr Leu Pro Trp Asp Glu Ala Val Asp Ser Ala
115         120         125
Phe Phe Ser Gly Phe Leu Ser Phe Trp Ser Tyr Ile Ile Ile Leu Asn
130         135         140
Thr Val Val Pro Ile Ser Leu Tyr Val Ser Val Glu Val Ile Arg Leu
145         150         155         160
Gly His Ser Tyr Phe Ile Asn Trp Asp Lys Lys Met Phe Cys Met Lys
165         170         175
Lys Arg Thr Pro Ala Glu Ala Arg Thr Thr Leu Asn Glu Glu Leu
180         185         190
Gly Gln Val Glu Tyr Ile Phe Ser Asp Lys Thr Gly Thr Leu Thr Gln
195         200         205
Asn Ile Met Val Phe Asn Lys Cys Ser Ile Asn Gly His Ser Tyr Gly
210         215         220
Asp Val Phe Asp Val Leu Gly His Lys Ala Glu Leu Gly Glu Arg Pro
225         230         235         240
Glu Pro Val Asp Phe Ser Phe Asn Pro Leu Ala Asp Lys Lys Phe Leu
245         250         255
Phe Trp Asp Pro Ser Leu Leu Glu Ala Val Lys Ile Gly Asp Pro His
260         265         270
Thr His Glu Phe Phe Arg Leu Leu Ser Leu Cys His Thr Val Met Ser
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Glu Glu Lys Asn Glu Gly Glu Leu Tyr Tyr Lys Ala Gln Ser Pro Asp
290         295         300
Glu Gly Ala Leu Val Thr Ala Ala Arg Asn Phe Gly Phe Val Phe Arg
305         310         315         320
Ser Arg Thr Pro Lys Thr Ile Thr Val His Glu Met Gly Thr Ala Ile
325         330         335
Thr Tyr Gln Leu Leu Ala Ile Leu Asp Phe Asn Asn Ile Arg Lys Arg
340         345         350
Met Ser Val Ile Val Arg Asn Pro Glu Gly Lys Ile Arg Leu Tyr Cys
355         360         365
Lys Gly Ala Asp Thr Ile Leu Leu Asp Arg Leu His His Ser Thr Gln
370         375         380
Glu Leu Leu Asn Thr Thr Met Asp His Leu Asn Glu Tyr Ala Gly Glu
385         390         395         400
Gly Leu Arg Thr Leu Val Leu Ala Tyr Lys Asp Leu Asp Glu Glu Tyr
405         410         415
Tyr Glu Glu Trp Ala Glu Arg Arg Leu Gln Ala Ser Leu Ala Gln Asp

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 Val Leu Thr Gly Asp Lys Gln Glu Thr Ala Val Asn Ile Gly Tyr Ser
 485 490 495
 Cys Lys Met Leu Thr Asp Asp Met Thr Glu Val Phe Ile Val Thr Gly
 500 505 510
 His Thr Val Leu Glu Val Arg Glu Glu Xaa Gln Glu Ser Pro Gly Glu
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 Asp Asp Gly Leu Ile Xaa Arg Ser Val Gly Asn Gly Phe Thr Tyr Gln
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 Asp Lys Leu Ser Ser Ser Lys Leu Thr Ser Val Leu Glu Ala Val Ala
 545 550 555 560
 Gly Glu Tyr Ala Leu Val Ile Asn Gly His Ser Leu Ala His Ala Leu
 565 570 575
 Glu Ala Asp Met Glu Leu Glu Phe Leu Glu Thr Ala Cys Ala Cys Lys
 580 585 590
 Ala Val Ile Cys Cys Arg Val Thr Pro Leu Gln Lys Ala Gln Val Val
 595 600 605
 Glu Leu Val Lys Lys Tyr Lys Lys Ala Val Thr Leu Ala Ile Gly Asp
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 Asp Val Pro Glu Gln Arg Ser Met Glu Tyr Pro Lys Leu Tyr Glu Pro
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 820 825 830
 Phe Ile Trp Gly Ser Leu Ala Val Tyr Phe Ala Ile Leu Phe Ala Met
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Val Leu Thr Thr Val Val Cys Ile Met Pro Val Val Ala Phe Arg Phe
      885              890              895
Leu Arg Leu Asn Leu Lys Pro Asp Leu Ser Asp Thr Val Arg Tyr Thr
      900              905              910
Gln Leu Val Arg Lys Lys Gln Lys Ala Gln His Arg Cys Met Arg Arg
      915              920              925
Val Gly Arg Thr Gly Ser Arg Arg Ser Gly Tyr Ala Phe Ser His Gln
      930              935              940
Glu Gly Phe Gly Glu Leu Ile Met Ser Gly Lys Asn Met Arg Leu Ser
895              950              955              960
Ser Leu Ala Leu Ser Ser Phe Thr Thr Arg Ser Ser Ser Trp Ile
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Gly Ala Asp Lys Pro Leu Lys Gly
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<210> 2357

<211> 408

<212> DNA

<213> Homo sapiens

<400> 2357

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<210> 2358

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2358

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Thr Val Trp Gly Ala Glu Pro Gln Asn Pro Leu Leu Pro Ala Asp Thr
20          25          30
Asn Glu Thr Gly Gly Thr Lys Val Ile Thr Ala Leu Phe Ala Gly Leu
35          40          45
Val Tyr Tyr Asp Ala Asp Gly Lys Thr His Asn Asp Val Ala Lys Ser

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      50              55              60
Ile Asp Phe Asp Gly Asp Arg Thr Tyr Thr Val Thr Leu Arg Lys Thr
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Arg Phe Ala Asp Gly Thr Glu Val Lys Ala His Asn Phe Val Lys Ala
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Ala Ala

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<210> 2359
 <211> 324
 <212> DNA
 <213> Homo sapiens

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<400> 2359
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324

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<210> 2360
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 <212> PRT
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<400> 2360
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Gly Leu Val Ile Glu Phe Gln Gln Thr Asn His Glu Gly Gln Met Ile
      35      40      45
Glu Trp Ile His His Ala Arg Arg Arg Ile Ala Gly Ile Val Ile Asn
      50      55      60
Pro Gly Ala Trp Thr His Thr Ser Ala Ala Ile His Asp Ala Leu Ile
65      70      75      80
Ala Ala Glu Val Pro Val Ile Glu Val His Ile Ser Asn Val His Arg
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Arg Glu Asp Phe Arg His Phe Ser Tyr Val Ser Arg
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<210> 2361
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 <212> DNA
 <213> Homo sapiens

<400> 2361

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 360
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 398

<210> 2362

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2362

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 Arg Trp Trp Gly Trp Gly Leu Gln Gln Leu Gly Pro Leu Ile Ser Leu
 35 40 45
 Lys Ala Gln Gln His Thr Val Ser Gln Val Cys Gln Val Pro Gln His
 50 55 60
 Gly His Pro Ala Leu Thr Ala Pro Pro Arg Leu Pro Ala Cys His His
 65 70 75 80
 Leu His Lys His Met Leu Gln Leu His Thr Arg Glu Thr Pro His Ala
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 Arg Phe

<210> 2363

<211> 833

<212> DNA

<213> Homo sapiens

<400> 2363

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 720
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<210> 2364

<211> 135

<212> PRT

<213> Homo sapiens

<400> 2364

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			20					25				30			
Ser	Leu	Pro	Pro	Ser	Ser	Glu	Val	Ser	Phe	Pro	Thr	Phe	Ser	Glu	Leu
	35					40						45			
Ser	Val	Ser	Met	Ala	Ser	Ser	Ala	Thr	Ser	Ala	Thr	Ser	Pro	Asp	Val
	50				55					60					
Leu	Ala	Ser	Val	Ser	Ile	Ala	Ser	Ser	Trp	Arg	Ser	Ser	Ala	Arg	Cys
65					70					75				80	
Ser	Lys	Pro	Thr	Ala	Xaa	Arg	Ser	Lys	Arg	Asp	Cys	Val	Thr	Thr	Gln
				85				90						95	
Lys	Val	Ala	Gln	Gly	Leu	Ala	Ala	Val	Pro	Ser	Gly	Ser	Leu	Cys	Ala
			100					105					110		
Gln	Pro	Pro	Ser	Ala	Gly	Phe	Pro	Gly	Pro	Cys	Cys	Gly	Ala	Arg	Ser
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Pro	Asp	Glu	Arg	Ser	Arg	Ser									
	130					135									

<210> 2365

<211> 429

<212> DNA

<213> Homo sapiens

<400> 2365

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 420
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<210> 2366
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 2366
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 20 25 30
 Thr Ala Glu Asp Met Arg Trp Leu Asp Gly Leu Cys Arg Gly Arg Gly
 35 40 45
 Ile Glu Leu Gly Ala Asn Gln Asn Cys Leu Gly His Met Glu Pro Trp
 50 55 60
 Leu Glu Thr Glu Ser His His His Arg Cys Glu Asn Pro Asp Gly Val
 65 70 75 80
 Asp Leu Pro Trp Gly Val His Ala Arg Ala Ser Thr Leu Ala Pro Val
 85 90 95
 Pro Glu Asn Leu Asp Phe Val Gln Arg Leu Leu Gly Glu Leu Thr Glu
 100 105 110
 Thr Val Ser Ser Lys Phe Leu Asn Val Gly Leu Asp Glu Pro Trp Glu
 115 120 125
 Leu Gly Thr Gly
 130

<210> 2367
 <211> 474
 <212> DNA
 <213> Homo sapiens

<400> 2367
 ngtgcacggg agaagacgtg cgcgcagttc ggcggaacct atccgggttc ggcgggcagt
 60
 ggggggtcacg agctcaccga cgcgcgcgcg ttcgcctcgt ggggcgtcga tttcgtcaaa
 120
 tacgatcggt gctccggtga ctccgcgcac gacgaccagg tcgcctcgtt caccgcgatg
 180
 cgtgacgcaa tccgatccac cggacgcccc atggtgtaca gcatcaaccc caacagcgaa
 240
 tcgcccggatc ggtccggagc ccaattcgat tggggcggtg tggcaaccat gacacgtacc
 300
 accaacgaca tctcgcggt gtggaccact cggccggcgg gtgccgatgc gacaccggca
 360

tcgggggtatc aggggatccg cgacatcatc gacgccgtgg ccccgatcgg cgcacggggt
 420
 gcgacggcgag cttcgtcgac atggacatgc tcgtcgtcgg tgctgcgaac gcgt
 474

<210> 2368

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2368

Xaa	Ala	Arg	Glu	Lys	Thr	Cys	Ala	Gln	Phe	Gly	Gly	Thr	Tyr	Pro	Gly
1				5					10					15	
Ser	Ala	Gly	Ser	Gly	Gly	His	Glu	Leu	Thr	Asp	Ala	Arg	Ala	Phe	Ala
		20						25					30		
Ser	Trp	Gly	Val	Asp	Phe	Val	Lys	Tyr	Asp	Arg	Cys	Ser	Gly	Asp	Ser
		35					40				45				
Ala	His	Asp	Asp	Gln	Val	Ala	Ser	Phe	Thr	Ala	Met	Arg	Asp	Ala	Ile
	50					55					60				
Arg	Ser	Thr	Gly	Arg	Pro	Met	Val	Tyr	Ser	Ile	Asn	Pro	Asn	Ser	Glu
	65				70				75					80	
Ser	Pro	Asp	Arg	Ser	Gly	Ala	Gln	Phe	Asp	Trp	Gly	Gly	Val	Ala	Thr
			85					90					95		
Met	Thr	Arg	Thr	Thr	Asn	Asp	Ile	Ser	Pro	Val	Trp	Thr	Thr	Arg	Pro
			100				105						110		
Ala	Gly	Ala	Asp	Ala	Thr	Pro	Ala	Ser	Gly	Tyr	Gln	Gly	Ile	Arg	Asp
		115					120					125			
Ile	Ile	Asp	Ala	Val	Ala	Pro	Ile	Gly	Ala	Arg	Val	Ala	Thr	Ala	Ala
	130					135					140				
Ser	Ser	Thr	Trp	Thr	Cys	Ser	Ser	Ser	Val	Ser	Ala	Thr	Arg		
145					150					155					

<210> 2369

<211> 408

<212> DNA

<213> Homo sapiens

<400> 2369

ctgaatggca ggcaggcaga ggccaccaga gccagccccc cgagaagccc tgctgagcca
 60
 aaggggagcg ccctgggacc taaccacagag ccccatctca ccttcccccg ttctttcaaa
 120
 gtgcctcccc caacccagct caggacttcg tccatccag ttcaggaagc acaagaggct
 180
 cccgaaagga agagggggcc accaagaagg ctcccagccg actcccactg cctcccagct
 240
 tccacatccg ccccgctcc caggtctacc cagacagggc ccccgagenc agactgccct
 300
 ggggagctca aggccacagc accagccagc ccaaggett ggcagtccca gtcccaagca
 360
 gatgaacgag ctgggactcc gcttcagcc cctccccctg cccctcct
 408

<210> 2370

<211> 136

<212> PRT

<213> Homo sapiens

<400> 2370

```

Leu Asn Gly Arg Gln Ala Glu Ala Thr Arg Ala Ser Pro Pro Arg Ser
 1           5           10           15
Pro Ala Glu Pro Lys Gly Ser Ala Leu Gly Pro Asn Pro Glu Pro His
           20           25           30
Leu Thr Phe Pro Arg Ser Phe Lys Val Pro Pro Pro Thr Pro Val Arg
 35           40           45
Thr Ser Ser Ile Pro Val Gln Glu Ala Gln Glu Ala Pro Glu Arg Lys
 50           55           60
Arg Gly Pro Pro Arg Arg Leu Pro Ala Asp Ser His Cys Leu Pro Ala
 65           70           75           80
Ser Thr Ser Ala Pro Pro Arg Ser Thr Gln Thr Gly Pro Pro Ser
           85           90           95
Xaa Asp Cys Pro Gly Glu Leu Lys Ala Thr Ala Pro Ala Ser Pro Arg
           100          105          110
Leu Gly Gln Ser Gln Ser Gln Ala Asp Glu Arg Ala Gly Thr Pro Pro
           115          120          125
Pro Ala Pro Pro Leu Pro Pro Pro
           130           135

```

<210> 2371

<211> 327

<212> DNA

<213> Homo sapiens

<400> 2371

```

gaattcgggtg tgcgatgcga gcctgcagcc tgggagcaga gacaaggagc aaaggcggtg
 60
agagggttgc cagggcacc cagttacagct ggagctgcag gggacccatc cctcgagaga
 120
ggcaggcact agtcatgagg caagagatgc ctcagaagag gatgtctggcc gcagggcaca
 180
gcagagaggg agatagccc gggcactcct caggaccggg cctcagggga cagcaaacaa
 240
gattcctgat agacgcgcc aggtcatgcc ttttcagtgg tgtgagccag gttctggcgt
 300
caggcggggc aagggtttca tgcagcn
 327

```

<210> 2372

<211> 104

<212> PRT

<213> Homo sapiens

<400> 2372

```

Met Arg Ala Cys Ser Leu Gly Ala Glu Thr Arg Ser Lys Gly Gly Glu
 1           5           10           15
Arg Val Ala Arg Ala Pro Ser Tyr Ser Trp Ser Cys Arg Gly Pro Ile
           20           25           30
Pro Arg Glu Arg Gln Ala Leu Val Met Arg Gln Glu Met Pro Gln Lys

```



```

      35              40              45
Arg Met Leu Ala Ala Gly His Ser Arg Glu Gly Asp Ser Pro Gly His
  50              55              60
Ser Ser Gly Pro Gly Leu Arg Gly Gln Gln Thr Arg Phe Leu Ile Asp
  65              70              75              80
Ala Pro Arg Ser Cys Leu Phe Ser Gly Val Ser Gln Val Leu Ala Ser
      85              90              95
Gly Gly Pro Arg Phe Ser Cys Ser
      100

```

<210> 2373

<211> 591

<212> DNA

<213> Homo sapiens

<400> 2373

```

gaattctgac attcaggaag tcaattgcag aaggtttaac caagttgatt ctgttttacc
  60
aaatcctgtc tattctgaaa agcggccaat gccagactca tctcatgatg tgaaagtctt
 120
cacttcaaa acatcagctg ttgagatgac ccaggcagta ttgaatactc agctttcttc
 180
agaaaaatgtt accaaagtgt agcaaaaattc accagcagtt tgtgaaacaa tttctgttcc
 240
caagtccatg tccactgagg aatataaatc aaaaattcaa aatgaaaata tgctacttct
 300
cgctttgtct tcacaggcac gtaagactca gaagacagta ttaaagatg ctaatcaaac
 360
tattcaggat tctaaaccag acagtgttga aatgaatcca aatacccaaa tgactggtaa
 420
ccaactgaat ttgaagaaca tggaaactcc aagtacttct aatgtaagtg gcagggtttt
 480
ggacaactcc ttttgcagtg gacaagaatc ctcaacaaaa ggaatgcctg ctaaaagtga
 540
cagtagctgt tccatggaag tgctagcaac ctgtctttcc ctgtggaaaa a
 591

```

<210> 2374

<211> 167

<212> PRT

<213> Homo sapiens

<400> 2374

```

Met Pro Asp Ser Ser His Asp Val Lys Val Leu Thr Ser Lys Thr Ser
  1              5              10              15
Ala Val Glu Met Thr Gln Ala Val Leu Asn Thr Gln Leu Ser Ser Glu
      20              25              30
Asn Val Thr Lys Val Glu Gln Asn Ser Pro Ala Val Cys Glu Thr Ile
      35              40              45
Ser Val Pro Lys Ser Met Ser Thr Glu Glu Tyr Lys Ser Lys Ile Gln
      50              55              60
Asn Glu Asn Met Leu Leu Leu Ala Leu Leu Ser Gln Ala Arg Lys Thr
  65              70              75              80
Gln Lys Thr Val Leu Lys Asp Ala Asn Gln Thr Ile Gln Asp Ser Lys

```

```

      85              90              95
Pro Asp Ser Cys Glu Met Asn Pro Asn Thr Gln Met Thr Gly Asn Gln
      100              105              110
Leu Asn Leu Lys Asn Met Glu Thr Pro Ser Thr Ser Asn Val Ser Gly
      115              120              125
Arg Val Leu Asp Asn Ser Phe Cys Ser Gly Gln Glu Ser Ser Thr Lys
      130              135              140
Gly Met Pro Ala Lys Ser Asp Ser Ser Cys Ser Met Glu Val Leu Ala
      145              150              155              160
Thr Cys Leu Ser Leu Trp Lys
      165

```

<210> 2375

<211> 535

<212> DNA

<213> Homo sapiens

<400> 2375

```

ntggccatgt cgttgctcag cagcggcacc ctggacagtt accttgagcg tcacaaacaa
60
ctggacgcga tgccgatgct gcactttctt gccctcgacg aagaaaaccc cgccagcatc
120
tataactgcc tgcgcgcgcg gcgggggcaat gcccacgcgg tacgcggggc gatcaccggc
180
gacatgtggg aaaacctcaa cgccacctgg ctggaaatgc gcagcatcgc cgccgggggc
240
ctggcccggc atggcatcag ccactttctg gactgggtca agcagcgttc gcacctgttc
300
cgccggggcaa cctcggggcac catcatgcgc aacgacgctt accggtttat tcgcctgggc
360
acgtttgtcg agcgcgcgga caacacctg cgctgtctgg atgcgcgcta cgaatgttt
420
ggtgaggagt cggaagaggt cagcgacctg tcggcacgcg ggtattacca gtggagcgcc
480
ctgctgcggg ccttgctcgc attcgaggcg tataccgaac tgtaccceaa cgcg
535

```

<210> 2376

<211> 178

<212> PRT

<213> Homo sapiens

<400> 2376

```

Xaa Ala Met Ser Leu Leu Ser Ser Gly Thr Leu Asp Ser Tyr Leu Glu
      1              5              10              15
Arg His Lys Gln Leu Asp Ala Met Arg Met Leu His Phe Phe Ala Leu
      20              25              30
Asp Glu Glu Asn Pro Ala Ser Ile Tyr Asn Cys Leu Arg Ala Ala Arg
      35              40              45
Gly Asn Ala His Ala Val Arg Gly Arg Ile Thr Ala Asp Met Trp Glu
      50              55              60
Asn Leu Asn Ala Thr Trp Leu Glu Met Arg Ser Ile Ala Ala Gly Gly
      65              70              75              80
Leu Ala Arg His Gly Ile Ser His Phe Cys Asp Trp Val Lys Gln Arg

```

	85		90		95
Ser His Leu Phe Arg Gly Ala Thr Ser Gly Thr Ile Met Arg Asn Asp					
	100		105		110
Ala Tyr Arg Phe Ile Arg Leu Gly Thr Phe Val Glu Arg Ala Asp Asn					
	115		120		125
Thr Leu Arg Leu Leu Asp Ala Arg Tyr Glu Met Phe Gly Glu Glu Ser					
	130		135		140
Glu Glu Val Ser Asp Leu Ser Ala Arg Gly Tyr Tyr Gln Trp Ser Ala					
	145		150		155
Leu Leu Arg Ala Leu Ser Ser Phe Glu Ala Tyr Thr Glu Leu Tyr Pro					
	165		170		175
Asn Ala					

<210> 2377

<211> 622

<212> DNA

<213> Homo sapiens

<400> 2377

acgcgtgaag gggtgaggct tcagaagtgg tagggaagaa cagaagctcc cttctgaggg
60
agcaccaccagg agatgaaagg aaccaatcct ggggtgctcct gcaccaggct tatcaacccc
120
tgacagacaa atggaaaact tctgtgatgg tgggacatga aaaaatatct cacccttctg
180
ataaaaatgga accagcagat agaagtagga atttttctgt taggtgaaat gtttttaaaa
240
atatgtatatac aggaaaaagc ataaaacagt attgactggc aaacatagaa ctggaatgta
300
aatataatgt tctttgcctt gaatgattta agtggcatga taaaactcat gccacagact
360
gggtaagaca aggaatctaa tccactctaa aaagaagaaa agcatagtaa aattctcctt
420
agagttagaa ttattaatag ttectatcta ctatttaatt taatcatagt taatgatgag
480
aatttcttaa atttaaaact tctgatgatg ctaaatgtgc atttctcatg attccttaaa
540
acaatttttg taaattctat tcttaggacc ttctgctttc agaaaaatta atgtcttgta
600
ttcttcgtat tggaggagat ct
622

<210> 2378

<211> 109

<212> PRT

<213> Homo sapiens

<400> 2378

Met Ser Phe Ile Met Pro Leu Lys Ser Phe Arg Ala Lys Asn Ile Ile					
	1		5		10
Phe Thr Phe Gln Phe Tyr Val Cys Gln Ser Ile Leu Phe Tyr Ala Phe					
	20		25		30
Ser Cys Ile His Ile Phe Lys Asn Ile Ser Pro Asn Arg Lys Ile Pro					

```

          35              40              45
Thr Ser Ile Cys Trp Phe His Phe Ile Arg Arg Val Lys Tyr Phe Phe
  50              55              60
Met Ser His His His Arg Ser Phe Pro Phe Val Cys Gln Gly Leu Ile
  65              70              75
Ser Leu Val Gln Asp His Pro Gly Leu Val Pro Phe Ile Ser Trp Val
          85              90              95
Leu Pro Gln Lys Gly Ala Ser Val Leu Pro Tyr His Phe
          100              105

```

<210> 2379

<211> 342

<212> DNA

<213> Homo sapiens

<400> 2379

```

tcatgacctg gagacttcgg aaactcaaca agactgcagg gcacccaggg gcaccagccc
  60
cggtcaccgc agaggatcag tgcactttgc catctggcag atcaactcat ggcacaactg
  120
ggaaacataa cattcacgct tgtgaaccga gacgccatac cccagcgggtg ccgagagcaa
  180
cagtgctctgt caggtctggg cagatgaggg cctccaggac acgaggactc actcgtctac
  240
cctgcccaact gggcagctgc tcgccactcc cctcctggag ggcaggagcg acaccacaca
  300
cacacacaag cagggaagct gtgcagcagt ggggagaaag ca
  342

```

<210> 2380

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2380

```

Met Thr Trp Arg Leu Arg Lys Leu Asn Lys Thr Ala Gly His Pro Gly
  1              5              10              15
Ala Pro Ala Pro Val Thr Ala Glu Asp Gln Cys Thr Leu Pro Ser Gly
          20              25              30
Arg Ser Thr His Gly Thr Thr Gly Lys His Asn Ile His Ala Cys Glu
          35              40              45
Pro Arg Arg His Thr Pro Ala Val Pro Arg Ala Thr Val Leu Cys Arg
          50              55              60
Ser Gly Gln Met Arg Ala Ser Arg Thr Arg Gly Leu Thr Arg Ser Pro
  65              70              75              80
Cys Pro Leu Gly Ser Cys Ser Pro Leu Pro Ser Trp Arg Ala Gly Arg
          85              90              95
Thr Pro His Thr His Thr Ser Arg Glu Ala Val Gln Gln Trp Gly Glu
          100              105              110
Ser

```

<210> 2381

<211> 434

<212> DNA

<213> Homo sapiens

<400> 2381

gtgcaccctg gccatatgga cgccagcgac gtcggcgctct tgcgtgacgt ggaaccgatc
 60
 ggcccaagta gagagatgga ttttgaatgg tgacgatgta cccgccgcag caagtggatg
 120
 ccgtcctctt tgacatggac ggaaccctgc tcaacacctt gccggcctgg tgcgtggcat
 180
 ctgagcatct gtggggcact tctctggctg acgctgacag cgccaagggtt gacgggggca
 240
 ccgtcgacga cgctgttgag ctgtatctgc gagaccacct tcaggcagat cccagggcca
 300
 ccatcgagcg tttcatggac atccttgacg ccaacctggc tggccacacc gagccgatgc
 360
 ccggagctga ccgcctcgtg aagaggctgt caggtcatgt acccatcgct gtggtgtcga
 420
 attccccgac gcgt
 434

<210> 2382

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2382

Met Val Thr Met Tyr Pro Pro Gln Gln Val Asp Ala Val Leu Phe Asp
 1 5 10 15
 Met Asp Gly Thr Leu Leu Asn Thr Leu Pro Ala Trp Cys Val Ala Ser
 20 25 30
 Glu His Leu Trp Gly Thr Ser Leu Ala Asp Ala Asp Ser Ala Lys Val
 35 40 45
 Asp Gly Gly Thr Val Asp Asp Val Val Glu Leu Tyr Leu Arg Asp His
 50 55 60
 Pro Gln Ala Asp Pro Gln Ala Thr Ile Glu Arg Phe Met Asp Ile Leu
 65 70 75 80
 Asp Ala Asn Leu Ala Gly His Thr Glu Pro Met Pro Gly Ala Asp Arg
 85 90 95
 Leu Val Lys Arg Leu Ser Gly His Val Pro Ile Ala Val Val Ser Asn
 100 105 110
 Ser Pro Thr Arg
 115

<210> 2383

<211> 393

<212> DNA

<213> Homo sapiens

<400> 2383

acgcgtgcgt tcagatgagc gccggacgaa actcctcggt cgcttcggca ggcattggatt
 60
 catgtcggca cgggcctttg aacaggatcg ccgtcgcgtg gctatccgcc gcgggtgggg
 120

cagaaaaacgc ccactctccc ttccccaggc gccggccgctc gagtcgtcta cgcaacgcac
 180
 gtctacatag gtgacttttt cataccccca ctttcgtact cggatgggct cggcgtgctc
 240
 gatgtcggca cgaataaata aatgcactga atgcgggttg tcgcacagga tgcattctgt
 300
 ctttcttgat gccaccacc ttgttacata ttctgccatg caaacacct tgtgattttt
 360
 ggccggagtgc aacatggtat gtgtatgcc ctg
 393

<210> 2384

<211> 125

<212> PRT

<213> Homo sapiens

<400> 2384

Met	Leu	His	Ser	Ala	Lys	Asn	His	Lys	Val	Phe	Cys	Met	Ala	Glu	Tyr
1			5						10					15	
Val	Thr	Arg	Trp	Val	Ala	Ser	Arg	Lys	Thr	Arg	Cys	Ile	Leu	Cys	Asp
		20						25					30		
Asn	Pro	His	Ser	Val	His	Leu	Ile	Phe	Arg	Ala	Asp	Ile	Glu	His	Ala
		35					40					45			
Glu	Pro	Ile	Arg	Val	Arg	Lys	Trp	Gly	Tyr	Glu	Lys	Val	Thr	Tyr	Val
	50					55					60				
Asp	Val	Arg	Cys	Val	Asp	Asp	Ser	Thr	Ala	Gly	Ala	Trp	Gly	Arg	Glu
65				70					75					80	
Ser	Gly	Arg	Phe	Leu	Pro	His	Pro	Arg	Arg	Ile	Ala	Thr	Arg	Arg	Arg
		85						90					95		
Ser	Cys	Ser	Lys	Ala	Arg	Ala	Asp	Met	Asn	Pro	Cys	Leu	Pro	Lys	Arg
		100					105					110			
Pro	Arg	Ser	Phe	Val	Arg	Arg	Ser	Ser	Glu	Arg	Thr	Arg			
	115						120					125			

<210> 2385

<211> 347

<212> DNA

<213> Homo sapiens

<400> 2385

accggttccc aaagtaggat ggctgggata gagggaaagg acatctttca ggcttggtat
 60
 gcactgtgct gtggactctt gttgtgggt cctaggtctg ccagcattt tggggttcac
 120
 ccgtgacct totacgggtt tccatgcccc cagcaccacg tccatcatca tttctggggt
 180
 cccctcacct cagagagcct gcttcctatg actgcgtggg ccagctggag aaggacgacc
 240
 caagaccct caagtctctg tgcctgacc ccaagcatag gcctgagtgc tcctggggcc
 300
 caaggccct tacgcactac tctctggggc ccaactgtctg cactctt
 347

<210> 2386

<211> 109

<212> PRT

<213> Homo sapiens

<400> 2386

```

Met Ala Gly Ile Glu Gly Lys Asp Ile Phe Gln Ala Cys Tyr Ala Leu
 1           5           10           15
Cys Cys Gly Leu Leu Trp Gly Pro Arg Ser Ala Gln His Phe Gly
          20           25           30
Val His Pro Val Thr Leu Tyr Gly Phe Pro Cys Pro Gln His His Val
          35           40           45
His His His Phe Trp Gly Pro Leu Thr Ser Glu Ser Leu Leu Pro Met
          50           55           60
Thr Ala Trp Ala Ser Trp Arg Arg Thr Thr Gln Asp Pro Ser Ser Phe
          65           70           75           80
Cys Val Leu Thr Pro Ser Ile Gly Leu Ser Ala Pro Gly Ala Gln Gly
          85           90           95
Pro Leu Arg Thr Thr Leu Trp Gly Pro Leu Ser Ala Leu
          100          105

```

<210> 2387

<211> 715

<212> DNA

<213> Homo sapiens

<400> 2387

```

ncggccgcac ttcaccttac ggaggggaga taatgagatc aattagaggc gccgtcaccc
60
cgccggagac agctgccgcc gcataagtaat caccgcggg ctgggtgcgc gggggctccc
120
cgctacctgc gcgcctgctg ctcccaccac gcggcaccca cccgggcgcg ccccgggccc
180
ctgtccgcag cccacagcca caccgcgcac cctacacct cettgcgcct ctgctgggga
240
gtccaccccc tccactgcga cagtgcgctg cggcccgggg tgtgggaggt cccgggactt
300
gggttgtgtg tgccctgtgtg ggggtagggg caggtgtccg cttgtgcgca tatgggcatg
360
agtgtacatg gcgtgtgcct ggagatgggc gagtgcaggc tggaaatgtgc cggcgtggca
420
cgtgtgtggg cccaaataga tgcgtgtgtg atcacatggt gtgttcgtgt ttgcacctgc
480
tgtgcctgtg tgtccgtatt tgagtgcctta caggaatgtg ggtgggtgagt acccgtatgt
540
gggtgcatct gcacttgtgc gtgtgtgtgt gtaggcgcgt gtgtgtgcgt gtgtgtgtta
600
ngggatacgt gtagatgtgc attagtgtga ctgtgtgtgc tcatgtgcct gtgcacgtgt
660
gtttgagggt ttgtgtgcatg ggtagcgtct gtgagagcca tgtgtatatc tgcag
715

```

<210> 2388

<211> 58

<212> PRT

<213> Homo sapiens

<400> 2388

```

Met Gly Met Ser Val His Gly Val Cys Leu Glu Met Gly Glu Cys Arg
 1              5              10              15
Leu Glu Cys Ala Gly Val Ala Arg Val Trp Ala Gln Ile Asp Ala Cys
              20              25              30
Val Ile Thr Cys Cys Val Arg Val Cys Thr Ser Cys Ala Cys Val Ser
              35              40              45
Val Phe Glu Cys Leu Gln Glu Cys Gly Trp
 50              55

```

<210> 2389

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2389

```

ntcaccctgc cgccggaagg ttgctcgtac cgcctggcca tcgtcccat gaagaagtcg
60
tatccgggcc acgccaagcg cgtcatgttg ggtgtctggt cgtttttgcg acagttcatg
120
tataccaagt tcgttatcgt caccgacgac gatataacg cccgcgactg gaacgacgtg
180
atctggggcca tcaccacgcg catggacccc aagcgcgaca cggtgatgat cgataacacg
240
ccgatcgact acctcgactt cgcctcgccg gtgtccggcc tgggttcgaa gatggggctc
300
gatccacgcg acaaatggcc cggccacacc acccgn
336

```

<210> 2390

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2390

```

Xaa Thr Leu Pro Pro Glu Gly Cys Ser Tyr Arg Met Ala Ile Val Thr
 1              5              10              15
Met Lys Lys Ser Tyr Pro Gly His Ala Lys Arg Val Met Leu Gly Val
              20              25              30
Trp Ser Phe Leu Arg Gln Phe Met Tyr Thr Lys Phe Val Ile Val Thr
              35              40              45
Asp Asp Asp Ile Asn Ala Arg Asp Trp Asn Asp Val Ile Trp Ala Ile
              50              55              60
Thr Thr Arg Met Asp Pro Lys Arg Asp Thr Val Met Ile Asp Asn Thr
              65              70              75              80
Pro Ile Asp Tyr Leu Asp Phe Ala Ser Pro Val Ser Gly Leu Gly Ser
              85              90              95
Lys Met Gly Leu Asp Pro Thr His Lys Trp Pro Gly His Thr Thr Arg
              100              105              110

```

<210> 2391

<211> 388

<212> DNA

<213> Homo sapiens

<400> 2391

gtcgactaac ctgcgtacag cgcgccacct acgttttagtc gcgaagcgtg tcggctccat
 60
 gtgcattccg gagctacacc atgaataaag tactacctga tccaccatc gatcccgcaa
 120
 aagaccgcgt cgctttcaac cgcgccatcg accattacct gcctaccgag ggcttccat
 180
 gcgtcaacga agacctgagt ttccaagacg ccctgctcta caccgccagc ctgctcgaca
 240
 gtgcctctgc caccggcgtg gattgcgggtg agctgctgca aagccctgaa cgggcgaaga
 300
 tcctggccgt gtggcatttg ctggaaattg caaaaaccac cgtagatcgc tccccatcg
 360
 agtgcctgac cgcaccaaag ccctgcct
 388

<210> 2392

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2392

Met	Asn	Lys	Val	Leu	Pro	Asp	Pro	Pro	Ile	Asp	Pro	Ala	Lys	Asp	Arg
1				5					10					15	
Val	Ala	Phe	Asn	Arg	Ala	Ile	Asp	His	Tyr	Leu	Pro	Thr	Gln	Gly	Phe
			20					25					30		
His	Cys	Val	Asn	Glu	Asp	Leu	Ser	Phe	Glu	Asp	Ala	Leu	Leu	Tyr	Thr
			35				40					45			
Ala	Ser	Leu	Leu	Asp	Ser	Ala	Ser	Ala	Thr	Ala	Leu	Asp	Cys	Gly	Glu
			50			55				60					
Leu	Leu	Gln	Ser	Pro	Glu	Arg	Ala	Lys	Ile	Leu	Ala	Val	Trp	His	Leu
65				70					75					80	
Leu	Glu	Ile	Ala	Lys	Thr	Thr	Val	Asp	Arg	Phe	Pro	Ile	Glu	Cys	Leu
				85				90						95	
Thr	Ala	Pro	Lys	Pro	Cys										
				100											

<210> 2393

<211> 411

<212> DNA

<213> Homo sapiens

<400> 2393

aaactgtcta ccgaggacca ggccgagcag gtagagattg tgaagcgctc tgagtccggc
 60
 atggtcaccg accccatcac tgcgcgcccg gatatgacca tcggggaagt agacgcgctg
 120
 tgcgcccgct tccgcatctc cggcctgcgg gtggtagacg aggacggcac cctgatgggc
 180
 atttgacca cccgcgatat gcgcttcgag cctgactttg accgcaaggt cagcgaggtc
 240

atgacggcta tgccgcttgt tgttgccgcg gaggggtgat ctaagaagga agccctcgaa
 300
 ctgctctcgg ccaataaggt gaaaaagctg cccatcgctg atgcggataa taagctcacc
 360
 ggcctgatta ccgtcaagga ctttgtcaag accgagcagt accccaacgc g
 411

<210> 2394

<211> 137

<212> PRT

<213> Homo sapiens

<400> 2394

Asn	Leu	Ser	Thr	Glu	Asp	Gln	Ala	Glu	Gln	Val	Glu	Ile	Val	Lys	Arg
1				5					10					15	
Ser	Glu	Ser	Gly	Met	Val	Thr	Asp	Pro	Ile	Thr	Ala	Arg	Pro	Asp	Met
			20					25					30		
Thr	Ile	Gly	Glu	Val	Asp	Ala	Leu	Cys	Ala	Arg	Phe	Arg	Ile	Ser	Gly
		35					40					45			
Leu	Pro	Val	Val	Asp	Glu	Asp	Gly	Thr	Leu	Met	Gly	Ile	Cys	Thr	Thr
	50					55					60				
Arg	Asp	Met	Arg	Phe	Glu	Pro	Asp	Phe	Asp	Arg	Lys	Val	Ser	Glu	Val
	65				70				75					80	
Met	Thr	Ala	Met	Pro	Leu	Val	Val	Ala	Arg	Glu	Gly	Val	Ser	Lys	Lys
			85						90					95	
Glu	Ala	Leu	Glu	Leu	Leu	Ser	Ala	Asn	Lys	Val	Glu	Lys	Leu	Pro	Ile
		100						105					110		
Val	Asp	Ala	Asp	Asn	Lys	Leu	Thr	Gly	Leu	Ile	Thr	Val	Lys	Asp	Phe
		115				120						125			
Val	Lys	Thr	Glu	Gln	Tyr	Pro	Asn	Ala							
	130					135									

<210> 2395

<211> 362

<212> DNA

<213> Homo sapiens

<400> 2395

aagctttcag aggagtttgc taaagtgtta aggatttgca tattttcaac tttagtcata
 60
 tctaagtggcc ccaataaaac agcgcgccgc attgggggct ggctttcctc aacaactaac
 120
 ttagcaatat taatctgacc ttttcctggt gattgggcat ttagtaataa tgcggggcca
 180
 atatcatcat actttccaaa ttttttgat tttttagaca tcaactgaag ttgtgacct
 240
 ttactgtctt tgtcttgatg gcaatctaaa caaacatctc ttgtattaag ttgttcactt
 300
 acccaaggat taggcactct aaaggcatga tcgcgtcgat catcgactcc catgtaacgc
 360
 gt
 362

<210> 2396

<211> 117

<212> PRT

<213> Homo sapiens

<400> 2396

```

Met Gly Val Asp Asp Arg Arg Asp His Ala Phe Arg Val Pro Asn Pro
 1             5             10             15
Trp Val Ser Glu Gln Leu Asn Thr Arg Asp Val Cys Leu Asp Cys His
             20             25             30
Gln Asp Lys Asp Ser Lys Trp Ser Gln Leu Gln Leu Met Ser Lys Lys
 35             40             45
Ser Lys Ile Phe Gly Lys Tyr Asp Asp Ile Gly Pro Ala Leu Leu Leu
 50             55             60
Asn Ala Gln Ser Pro Gly Lys Gly Gln Ile Asn Ile Ala Lys Leu Val
 65             70             75             80
Val Asp Glu Ser Gln Pro Pro Met Arg Arg Ala Val Leu Leu Gly His
             85             90             95
Leu Asp Met Thr Lys Val Glu Asn Met Gln Ile Leu Asn Thr Leu Ala
 100             105             110
Asn Ser Ser Glu Ser
 115

```

<210> 2397

<211> 449

<212> DNA

<213> Homo sapiens

<400> 2397

```

nacagcacac tccgcctect ccgacgatca tagctttcac gtcggacatg atcccccgcc
 60
tagtggtacta ctggtccttc tccgtccctc cctacgggga ccacacttcc tacaccatgg
 120
aagggtatcat caacaacact ctctccatct tcaaagtcgc agacttcaaa aacaaaagca
 180
agggaaaaccc gtactctgac ctgggtaacc ataccacatg caggtatcgt gatttccgat
 240
acccacctgg acacccccag gagtataaac acaacatcta ctattggcat gtgattgcag
 300
ccaagctggc ttttatcatt gtcattggag acgtcatcta ctctgtgaaa tttttcattt
 360
catatgcaat tcccgatgta tcaaagcgca caaagagcaa gatccagaga gaaaaatacc
 420
taacccaaaa gcttcttcat gagaatcac
 449

```

<210> 2398

<211> 76

<212> PRT

<213> Homo sapiens

<400> 2398

```

Cys Thr Thr Gly Pro Ser Pro Ser Leu Pro Thr Gly Thr Thr Leu Pro
 1             5             10             15
Thr Pro Trp Lys Gly Thr Ser Thr Thr Leu Ser Pro Ser Ser Lys Ser

```

```

                20                25                30
Gln Thr Ser Lys Thr Lys Ala Arg Glu Thr Arg Thr Leu Thr Trp Val
      35                40                45
Thr Ile Pro His Ala Gly Ile Val Ile Ser Asp Thr His Leu Asp Thr
      50                55                60
Pro Arg Ser Ile Asn Thr Thr Ser Thr Ile Gly Met
      65                70                75

```

<210> 2399

<211> 344

<212> DNA

<213> Homo sapiens

<400> 2399

```

acgcgcatg cttcacgaaa cgggtcacgc gcttcattac caagcagctg gcaaacacaa
60
cttggtatttc gagcgggttg cgccagtcga gatcatggag ttcgtggcct actgcttgca
120
gtttctgacg atcgagcgcc tggccatgtc aggggaactt tcgggtaaa aacaggaact
180
agtcaaaccc tttgctggtc cggccaggct tggagggggt cgaaaacct caacgccaca
240
aaacgggttcc agcactgggt ttataaacag cctaaaaatcc cgacaagtaa agaactcgat
300
accgtatggc ttgagatgcg acacacgctc ggggtggatt ggct
344

```

<210> 2400

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2400

```

Met Leu His Glu Thr Gly His Ala Leu His Tyr Gln Ala Ala Gly Lys
1      5      10      15
His Asn Leu Tyr Phe Glu Arg Val Ala Pro Val Glu Ile Met Glu Phe
20     25     30
Val Ala Tyr Cys Leu Gln Phe Leu Thr Ile Glu Arg Leu Ala Met Ser
35     40     45
Gly Glu Leu Ser Gly Lys Glu Gln Glu Leu Val Lys Pro Phe Ala Gly
50     55     60
Pro Ala Arg Leu Gly Gly Val Arg Lys Pro Thr Thr Pro Gln Asn Gly
65     70     75     80
Ser Ser Thr Gly Phe Ile Asn Ser Leu Lys Ser Arg Gln Val Lys Asn
85     90     95
Ser Ile Pro Tyr Gly Leu Arg Cys Asp Thr Arg Ser Gly Trp Ile Gly
100    105    110

```

<210> 2401

<211> 479

<212> DNA

<213> Homo sapiens

<400> 2401

nntaccgagg taaaactcga tagcctcggt gtcaccgacc agatgcgctc tgggcgctgc
 60
 tggatgtttg ccgcgctcaa cgtattccgc caccgcgcgg ccaaggagct caacatcgat
 120
 gactttgagt ttctctttac ctacctcgag tacttcgaca aactagagcg cgccaacttc
 180
 gcgctcaacc aactgctgga tctcaccgaa gacggcaccg actgggatga ccgcgacgtg
 240
 gctacttccc tcgagctcac aggcgacgac ggcggctggt ggtcattttt caccaacctc
 300
 gtggacaagt acggcgagct cccggccgag gtcacgcctg aggtgcactc gtccggccac
 360
 accgaccaga tgaatcgaga tatcgccacc atcatccgcc gcgcgcgcga ccgtgcgggtg
 420
 gaaggcgagg gggatcgagg gggcatcgct aagcaagccc gccccgatat ccaacgcgt
 479

<210> 2402

<211> 159

<212> PRT

<213> Homo sapiens

<400> 2402

Xaa	Thr	Glu	Val	Lys	Leu	Asp	Ser	Leu	Gly	Val	Thr	Asp	Gln	Met	Arg
1				5					10					15	
Ser	Gly	Arg	Cys	Trp	Met	Phe	Ala	Ala	Leu	Asn	Val	Phe	Arg	His	Arg
			20						25				30		
Ala	Ala	Lys	Glu	Leu	Asn	Ile	Asp	Asp	Phe	Glu	Phe	Ser	Phe	Thr	Tyr
		35					40					45			
Leu	Gln	Tyr	Phe	Asp	Lys	Leu	Glu	Arg	Ala	Asn	Phe	Ala	Leu	Asn	Gln
		50				55					60				
Leu	Leu	Asp	Leu	Thr	Glu	Asp	Gly	Thr	Asp	Trp	Asp	Asp	Arg	Asp	Val
65					70					75				80	
Ala	Thr	Ser	Leu	Glu	Leu	Thr	Gly	Asp	Asp	Gly	Gly	Trp	Trp	Ser	Phe
				85				90						95	
Phe	Thr	Asn	Leu	Val	Asp	Lys	Tyr	Gly	Ala	Val	Pro	Ala	Glu	Val	Met
		100						105					110		
Pro	Glu	Val	His	Ser	Ser	Gly	His	Thr	Asp	Gln	Met	Asn	Arg	Asp	Ile
		115					120					125			
Ala	Thr	Ile	Ile	Arg	Arg	Ala	Ala	His	Arg	Ala	Val	Glu	Gly	Glu	Gly
		130					135				140				
Asp	Arg	Gly	Gly	Ile	Val	Lys	Gln	Ala	Arg	Pro	Asp	Ile	Gln	Arg	
145					150						155				

<210> 2403

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2403

ntcgatgaacg gcgataaccc gctggactcg tctgcggttc acccggaagc ctaccgctg
 60
 gtgcagcgta ttgccgccga gaccggccgt gatatccgtt cgctgatcgg tgacgccgcg
 120

ttctctcaagc gcctggaccg gaagaagtac accgacgaaa ctttcgggtgt gccgaccatc
 180
 accgacatcc tgcaagagct ggaaaaacct ggccgcgacc cgcgtcccga gttcaagacc
 240
 gccgagttcc aggacggtgt tgaagacctc aaggacctgc agccgggcat gatcctcgaa
 300
 ggcggtgtca ccaacgtgac caactttggc gcctttgtgg atatcggcgt gcatcaggac
 360
 ggtttggtgc acatctctgc acttttcg
 387

<210> 2404
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 2404
 Xaa Met Asn Gly Asp Asn Pro Leu Asp Ser Ser Ala Val His Pro Glu
 1 5 10 15
 Ala Tyr Pro Leu Val Gln Arg Ile Ala Ala Glu Thr Gly Arg Asp Ile
 20 25 30
 Arg Ser Leu Ile Gly Asp Ala Ala Phe Leu Lys Arg Leu Asp Pro Lys
 35 40 45
 Lys Tyr Thr Asp Glu Thr Phe Gly Val Pro Thr Ile Thr Asp Ile Leu
 50 55 60
 Gln Glu Leu Glu Lys Pro Gly Arg Asp Pro Arg Pro Glu Phe Lys Thr
 65 70 75 80
 Ala Glu Phe Gln Asp Gly Val Glu Asp Leu Lys Asp Leu Gln Pro Gly
 85 90 95
 Met Ile Leu Glu Gly Val Val Thr Asn Val Thr Asn Phe Gly Ala Phe
 100 105 110
 Val Asp Ile Gly Val His Gln Asp Gly Leu Val His Ile Ser Ala Leu
 115 120 125
 Ser

<210> 2405
 <211> 859
 <212> DNA
 <213> Homo sapiens

<400> 2405
 ttgcaagtaa catcaaaagt catctacaga agcaaaagac aaaaaggccc ctccacctgc
 60
 aaattaaatg gaataatttg ctttatgaga agctcaccat tgggggtcatt cttatttttt
 120
 ctcaactccac atttcactac aaaccaagga aagctccctc atggaccgac atctggtgag
 180
 ccttcacttc tccccctggca atgctctggc acctgacacc tggcctccct cctctttcca
 240
 gcaatcctgg taccaacgaa tggctcacca ccacccaccc caatgcccg accgcagacc
 300
 tgcattccct ccattctaca gccccaaatc caaacgttta ttcattctac ctcccactct
 360

actcctcagc aatttcttcc accgtagact ctgggtaatt ggactgactg aagcccaggg
 420
 gtcagtttct gtcctaagag cgctccagggt ggctgcaccc tgtgcccaga gccaggcccc
 480
 ctgctatagg ctgcgtgcac tccccctgca ggtgctgggg acaccgcaac cctcctcctg
 540
 gggacaccta cttgcctttg caggccctcg ggggtcactt tcaccaggaa gccgcctctg
 600
 ggtgaggtaa tatccctcta tcacagcatt ggccacacca cattgcaaac gctgctgggg
 660
 tccactgtct tcaccaatta caccatgagc tccacagact ccaggaccat ggcttctacc
 720
 tctcagttcc cagtgctagc tatggggccc agcacacagg gaacagcagt tcaattaccc
 780
 agttcactga agggcagacc tgggatcata cagggagcaa ggaagcttga gccccctcag
 840
 gagaagggga agaacgcgt
 859

<210> 2406

<211> 149

<212> PRT

<213> Homo sapiens

<400> 2406

Met Asp Arg His Leu Val Ser Leu His Leu Ser Pro Gly Asn Ala Trp
 1 5 10 15
 Pro Pro Asp Thr Trp Pro Pro Ser Ser Phe Gln Gln Ser Trp Tyr Gln
 20 25 30
 Arg Met Ala His His His Pro Pro Gln Cys Pro Asp Arg Arg Pro Ala
 35 40 45
 Phe Leu Pro Ser His Ser Pro Lys Ser Lys Pro Leu Phe Ile Leu Pro
 50 55 60
 Pro Ile Leu Leu Leu Thr Asn Phe Phe His Arg Arg Leu Trp Leu Ile
 65 70 75 80
 Gly Leu Thr Glu Ala Gln Gly Ser Val Ser Val Leu Arg Ala Leu Gln
 85 90 95
 Val Ala Ala Pro Cys Ala Gln Ser Gln Ala Pro Cys Tyr Arg Leu Ala
 100 105 110
 Ala Leu Pro Leu Gln Val Leu Gly Thr Pro Gln Pro Ser Ser Trp Gly
 115 120 125
 His Leu Leu Ala Phe Ala Gly Pro Arg Gly Ser Leu Leu Pro Gly Ser
 130 135 140
 Arg Leu Trp Val Arg
 145

<210> 2407

<211> 303

<212> DNA

<213> Homo sapiens

<400> 2407

nacgcgtggt ttatcttcag catggtgacg gcgattgggt tagccgttat ggctgcgggtc
 60

gtattcatcg agcaaggcca ggcaggtatc ccggtgcagt acgccaagcg gatggtgggg
 120
 cgccgaatgt ttggtggctc gacgacgtac attccgctca aggtaaacca atctggcggtt
 180
 atcccggtca tctttgcttc gtgatcctg taccttcggg tgctctacgc aactttccgg
 240
 ccgcagacgt ccgcggcaaa gtggatcggt cactacttca cgcgcggtga ccatccggtg
 300
 tac
 303

<210> 2408

<211> 101

<212> PRT

<213> Homo sapiens

<400> 2408

Xaa Ala Trp Phe Ile Phe Ser Met Val Ile Ala Ile Gly Leu Ala Val
 1 5 10 15
 Met Ala Ala Val Val Phe Ile Glu Gln Gly Gln Arg Arg Ile Pro Val
 20 25 30
 Gln Tyr Ala Lys Arg Met Val Gly Arg Arg Met Phe Gly Gly Ser Thr
 35 40 45
 Thr Tyr Ile Pro Leu Lys Val Asn Gln Ser Gly Val Ile Pro Val Ile
 50 55 60
 Phe Ala Ser Ser Ile Leu Tyr Leu Pro Val Leu Tyr Ala Thr Phe Arg
 65 70 75 80
 Pro Gln Thr Ser Ala Ala Lys Trp Ile Gly His Tyr Phe Thr Arg Gly
 85 90 95
 Asp His Pro Val Tyr
 100

<210> 2409

<211> 322

<212> DNA

<213> Homo sapiens

<400> 2409

ccatggtttc aagcccccat tgtgtcagcc cagagagcaa ctggagaccc tctgacacca
 60
 cctcccgccc caacaggagg ggaagccgaa attcagattg tggaaactgc ctacaatttt
 120
 cttccggcca aatgacctc cctaggctac caagacctg gcctaagggg agccgaggtc
 180
 tcggcccgac tgcagacgcc cgcaccctga ctccagatgc ctccagggca tccagtgagg
 240
 ccctgagggg cctgctgtgg etttgttctt gttggctggg ctgggggtct gacctggtga
 300
 gggacatgag tgtcagtggt gg
 322

<210> 2410

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2410

```

Met Val Ser Ser Pro His Cys Val Ser Pro Glu Ser Asn Trp Arg Pro
 1          5          10          15
Ser Asp Thr Thr Ser Arg Pro Asn Arg Arg Gly Ser Arg Asn Ser Asp
          20          25          30
Cys Gly Asn Cys Leu Gln Phe Ser Ser Gly Gln Met Thr Leu Pro Arg
          35          40          45
Leu Pro Arg Pro Trp Pro Lys Gly Ser Arg Gly Leu Gly Pro Thr Ala
          50          55          60
Asp Ala Arg Thr Leu Thr Pro Asp Ala Ser Glu Ala Ser Arg Trp Ala
          65          70          75          80
Leu Arg Gly Leu Leu Trp Leu Cys Ser Cys Trp Leu Gly Trp Gly Ser
          85          90          95
Asp Leu Val Arg Asp Met Ser Val Ser Val
          100          105

```

<210> 2411

<211> 371

<212> DNA

<213> Homo sapiens

<400> 2411

```

ccatgggctg ggtgctggag acacgagatc aggcaggccc tgccctctggg gctcattcta
60
gggtctcgcg cagacagggg gacagagggg gctgtgagag ccctgaggct gaggtagcttt
120
ctgggggaagc accatcccta gggacctcgc cgttcgggtca gtggccgctg ctgtcgggtg
180
gcagagcaga ggctggggcg agagtgggtca gcaggcctgc tggtaggcagc ttgtgcagga
240
agggaggatg gaggttggct tgtggctggc aagaggggtg catgcacgtc gctgaaaggg
300
aggcctgggc ccgaggcctg ggtgtgggga cgcctgagga gactgtacag tgtggagtcg
360
gggggggctgc g
371

```

<210> 2412

<211> 123

<212> PRT

<213> Homo sapiens

<400> 2412

```

Met Gly Trp Val Leu Glu Thr Arg Asp Gln Ala Gly Pro Ala Pro Gly
 1          5          10          15
Ala His Ser Arg Val Cys Gly Arg Gln Gly Asp Arg Gly Ser Cys Glu
          20          25          30
Ser Pro Glu Ala Glu Trp Leu Ser Gly Glu Ala Pro Ser Leu Gly Thr
          35          40          45
Ser Ala Phe Gly Gln Trp Pro Leu Leu Ser Val Cys Arg Ala Glu Ala
          50          55          60
Gly Ala Arg Val Val Ser Arg Pro Ala Gly Gly Ser Leu Cys Arg Lys

```

65		70		75		80									
Gly	Gly	Trp	Arg	Leu	Ala	Cys	Gly	Trp	Gln	Glu	Gly	Gly	Met	His	Val
			85					90						95	
Ala	Glu	Arg	Gln	Ala	Trp	Ala	Arg	Gly	Leu	Gly	Val	Gly	Thr	Pro	Glu
			100					105						110	
Glu	Thr	Val	Gln	Cys	Gly	Val	Gly	Gly	Ala	Ala					
		115					120								

<210> 2413
 <211> 784
 <212> DNA
 <213> Homo sapiens

<400> 2413
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 60
 gtggctggat ttagggtgca tataaaggca gtgaggctgg agaagtattc taggtctgct
 120
 taggctcact gaggaattgg ggttcttctt gaagagcatg gagcccttgg aggacctcca
 180
 cagcaggcag agagacggca gcctcctcgg atctgattgc ccagccccac ttacacagg
 240
 ggctgagggt agctcttccc atggagtgcga tccttctctga tcagcctgag gagagcagg
 300
 ccccaccatc ctgcacctgg tgcagaaaaa cctgtgaag ctgactaca gaaagacacc
 360
 accaggtggc aggcctggag attgcatgga gggccgccc cccccaacca attctttgat
 420
 aatagcacag tgttgaagag agggggccat aaaagactga atccctgttc atgccaggct
 480
 ggctctgccc aacatatatg agactgcaag ttctgccact gtgggctgtg tacccacaag
 540
 ccacaggtcc ctctgaacct gtgaatcagg tcttgggagc tattcgagca ggctggattt
 600
 tctctctgc ctcgggggac ctgagagtaa gttacagact tcatgacct tcaccccaaa
 660
 acacttgagt atgtatcacc taagaacaag ggcatttctc tgtagaacca caatgcaatt
 720
 tgcaagttca ggaaatttaa ctgatacaat actattatct aattacggag agaagacaac
 780
 gcgt
 784

<210> 2414
 <211> 137
 <212> PRT
 <213> Homo sapiens

<400> 2414
 Met Lys Ser Val Thr Tyr Ser Gln Val Pro Arg Gly Arg Gly Glu Asn
 1 5 10 15
 Pro Ala Cys Ser Asn Ser Ser Gln Asp Leu Ile His Arg Phe Arg Gly
 20 25 30
 Thr Cys Gly Leu Trp Val His Ser Pro Gln Trp Gln Asn Leu Gln Ser

35	40	45
His Ile Cys Trp Ala Glu Pro Ala Trp His Glu Gln Gly Phe Ser Leu		
50	55	60
Leu Trp Pro Pro Leu Phe Asn Thr Val Leu Leu Ser Lys Asn Trp Leu		
65	70	75
Gly Gly Ala Gly Pro Pro Cys Asn Leu Gln Ala Cys His Leu Val Val		
85	90	95
Ser Phe Cys Ser Ala Ala Ser Gln Gly Phe Ser Ala Pro Gly Ala Gly		
100	105	110
Trp Trp Gly Pro Ala Leu Leu Arg Leu Ile Arg Lys Asp Ala Leu His		
115	120	125
Gly Lys Ser Ser Pro Gln Pro Pro Val		
130	135	

<210> 2415

<211> 2164

<212> DNA

<213> Homo sapiens

<400> 2415

ctcgtgccag cgctcctcgcg ggtctgaatg gaaggggtcga ggtcgtcgtc ggcggcgagc
60
agatcctgaa gccagaactc caccctggcg ccccgcccat gcggcgggag aggtgcggcg
120
ccccccacc gcgtcgcgcg catggaggtg ctgcggcgct ctcggtctct cgctcgggag
180
atcatggacg cctttgatcg ctggcccaca gacaaggagc tgggtggcca ggctaaagca
240
ctaggccggg agtacgtgca cgcgcggcct ttgcgcgcgc gcctctcctg gagcgctcca
300
gagcgtgcct cgcctgcccc tggaggacgc ctggctgagg tgtgcgcggt gctgctgcgc
360
ctgggggatg agctggagat gatccggccc agcgtctacc gcaacgtggc gcgtcagctg
420
cacatctccc tgcagtctga cctgtgtggt accgatgcgt tcctggcgct ggctggccac
480
atcttctctg caggcatcac gtggggcaag gtggtgtccc tgtatgcggt ggccgcgggg
540
ctggccgtgg actgtgtgag gcaggcccag cctgccatgg tccacgcctc cgtggactgc
600
ctgggggagt tcgtgcgcaa gacctggca acctggctgc ggagacgcgg cggtatggact
660
gatgtctcca agtgtgtggt cagcacagac cctggcctcc gctcccactg cctggtggct
720
gcaactcgca gcttcggccg ctctctgaag gctgccttct tcgtgtgtgt gccagagaga
780
tgagctgccc acctggcagt ggccgcagcc tggccctctg ggcccaacgc aggaggccct
840
cagcaccga acacatcttc ctccctccca cccgagcctg gagcactcta acctcggaga
900
ccccetaagc cccgttcttc cgcagaccca ggccctccgg aagggtgagt gggggggggc
960
tttctgagc ctggagctgg gctttggggc agcctgcgac cctccccgct tgtgtccctt
1020

ctctctgtgat ctctgtgttt tcccttttct ttctggggcc aggaagtcag ggtcaactcc
 1080
 caggcctcag gtgaaggggc ccagaacacc tgctctcacc tgagccccag gtgaaggggc
 1140
 ccgggaacac ctgctctcac ctgagcccca ggtgaagggg cccgggaaca cctgctctca
 1200
 cctgagcccc tggtaagggg gcccggaaca cctgctctca cctgagcccc aggtgaaggg
 1260
 gcccggaaca cctgctctca cctgagcccc aggtgaaggg gcccggaaca cttgctctca
 1320
 cctgagcccc aggtgaaggg gcccggaac acctctcacc tgaaccgggg ggtcccatcc
 1380
 caggaagaag ggccatctca ggacatgagt cctcaggggc cctgcacatt caatctgaag
 1440
 gtgaccctgg cctggctgaa gctggaagag ctgtggggac tcagccctga aacagagcgt
 1500
 aagggtcaca tgctggttgc ttaatcgtt tctggaggaa gagtatgaca ccacttgtg
 1560
 atggggctct tgtgcgttgg ggaccggggc cgggggctc caggccagca cacctaacc
 1620
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 1680
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 1740
 ggggatgtgc ctattagggc tccgtaagaa ctcagatgcc tgggaagccc agccccctag
 1800
 gtgccccacc acacagcctt cccctgacgc ctacatttct aggcacatgt gaggcatctt
 1860
 tcctggagcc ccgagccagc cctgtccctc cccagtgcag catggcactc aggagataca
 1920
 ggctggacat ggggcagtcg ttctggggag gctggccta gcagccacc accctgagccc
 1980
 tccccgccag gcttcgtgct ggggtggggc atgtgccagg acaggagggg cccggcgga
 2040
 agccagcccc ggactcatcg tgacattgag atccactgg agggtagggg tggtataataa
 2100
 cttctccaaa cgataaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa
 2160
 aaaa
 2164

<210> 2416

<211> 213

<212> PRT

<213> Homo sapiens

<400> 2416

Met	Glu	Val	Leu	Arg	Arg	Ser	Ser	Val	Phe	Ala	Ala	Glu	Ile	Met	Asp
1				5				10				15			
Ala	Phe	Asp	Arg	Trp	Pro	Thr	Asp	Lys	Glu	Leu	Val	Ala	Gln	Ala	Lys
			20				25				30				
Ala	Leu	Gly	Arg	Glu	Tyr	Val	His	Ala	Arg	Leu	Leu	Arg	Ala	Gly	Leu
	35					40				45					
Ser	Trp	Ser	Ala	Pro	Glu	Arg	Ala	Ser	Pro	Ala	Pro	Gly	Gly	Arg	Leu

50	55	60
Ala Glu Val Cys Ala Val Leu Leu Arg Leu Gly Asp Glu Leu Glu Met		
65	70	75
Ile Arg Pro Ser Val Tyr Arg Asn Val Ala Arg Gln Leu His Ile Ser		80
	85	90
Leu Gln Ser Glu Pro Val Val Thr Asp Ala Phe Leu Ala Val Ala Gly		95
	100	105
His Ile Phe Ser Ala Gly Ile Thr Trp Gly Lys Val Val Ser Leu Tyr		110
	115	120
Ala Val Ala Ala Gly Leu Ala Val Asp Cys Val Arg Gln Ala Gln Pro		125
	130	135
Ala Met Val His Ala Leu Val Asp Cys Leu Gly Glu Phe Val Arg Lys		140
	145	150
Thr Leu Ala Thr Trp Leu Arg Arg Arg Gly Gly Trp Thr Asp Val Leu		155
	160	165
Lys Cys Val Val Ser Thr Asp Pro Gly Leu Arg Ser His Trp Leu Val		170
	175	180
Ala Ala Leu Cys Ser Phe Gly Arg Phe Leu Lys Ala Ala Phe Phe Val		185
	190	195
Leu Leu Pro Glu Arg	200	205
210		

<210> 2417

<211> 615

<212> DNA

<213> Homo sapiens

<400> 2417

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 120
 cagttgttag ttttcacact ttaaaaaagg ctttcaatta taaaatcttt ctccattatt
 180
 acgttttttc acaactgtga tccacgccac agttgcaaat aatcaacata gaaaaattaa
 240
 ataacataat tgatgaaaag ttagtttttc acaaaaatac gaaaaatttc atcacctaga
 300
 gaggaaaatg ttatgacaac ctatttcogat aaaattgaaa aaatctcctt tgagggagaa
 360
 aaatccacaa atccttttgc tttcaaacat tatgatgcta atcaagtaat tttaggtaaa
 420
 actatggctg aacatttacg cttaacgggtg tgttattggc ataccttttg ctggaatggg
 480
 aatgatattg ttgggctagg ttctttggaa cgaagtggc agaaaaattc aaatttgctt
 540
 gctggcgtag aacaaaaagc cgatattgct tttgagtttt tgaataagtt aggcgtgcct
 600
 tattattggt ttcat
 615

<210> 2418

<211> 101

<212> PRT

<213> Homo sapiens

<400> 2418

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Met Thr Thr Tyr Phe Asp Lys Ile Glu Lys Ile Ser Phe Glu Gly Glu
 1          5          10          15
Lys Ser Thr Asn Pro Phe Ala Phe Lys His Tyr Asp Ala Asn Gln Val
          20          25          30
Ile Leu Gly Lys Thr Met Ala Glu His Leu Arg Leu Thr Val Cys Tyr
          35          40          45
Trp His Thr Phe Cys Trp Asn Gly Asn Asp Met Phe Gly Leu Gly Ser
          50          55          60
Leu Glu Arg Ser Trp Gln Lys Asn Ser Asn Leu Leu Ala Gly Ala Glu
65          70          75          80
Gln Lys Ala Asp Ile Ala Phe Glu Phe Leu Asn Lys Leu Gly Val Pro
          85          90          95
Tyr Tyr Cys Phe His
          100

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<210> 2419

<211> 318

<212> DNA

<213> Homo sapiens

<400> 2419

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aaattttcag aagtctcggt gttgcgcggt caaacagga cagaggagg acgaccgcct
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ccccgtgacg ctgcttcttc ttctgcctg cagctgagg gtctgttttg tgctgcttc
120
gtccttctct cacgtacaca gggggcagct tagcctctgg gatgggagtg gcttcataca
180
tgagacacat gcccagatcg aggtagatgt cgctgtcgtc ctgcggcggg gtgggtgggg
240
tccagaacgg catgacttct gtctgcccac cgacatcttc gtagacatac tccatgttgt
300
aggcatcccc tcacgcgt
318

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<210> 2420

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2420

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Met Glu Tyr Val Tyr Glu Asp Val Asp Gly Gln Thr Glu Val Met Pro
 1          5          10          15
Phe Trp Thr Pro Pro Thr Pro Pro Gln Asp Asp Ser Asp Ile Tyr Leu
          20          25          30
Asp Ser Gly Met Cys Leu Met Tyr Glu Ala Thr Pro Ile Pro Glu Ala
          35          40          45
Lys Leu Pro Pro Val Tyr Val Arg Lys Glu Arg Lys Arg His Lys Thr
          50          55          60
Asp Pro Ser Ala Ala Gly Arg Lys Lys Lys Gln Arg His Gly Glu Ala
65          70          75          80
Val Val Pro Pro Arg Ser Leu Phe Asp Arg Ala Thr Pro Gly Leu Leu

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85 90 95

Lys Ile

<210> 2421
 <211> 420
 <212> DNA
 <213> Homo sapiens

<400> 2421
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 tactggttgt ttgacagtgc agggcttggtg cacagacgtg agccacaggg cagcacaacg
 120
 ctgtcgcaag tctgagtagg gattatcatg acggatacaa cttcagcccc gcgttacgcg
 180
 ctgcgtgggc tacagcttat tggctggcgt gacatgcaac acgcgctgga tttcctgttc
 240
 gcggacgggc agatgaaatc gggcacgctg gtggccatca acgcagaaaa gatgctggcg
 300
 gttgaagata atgcggaagt gaaaagcctg attgaagccg cggagtgttaa ataccgggcc
 360
 ggtattagcg tagtgcgctc aattcgtaaa aagttccccc acgtggagtg gtgctcgca
 420

<210> 2422
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 2422
 Met Thr Asp Thr Thr Ser Ala Pro Arg Tyr Ala Leu Arg Gly Leu Gln
 1 5 10 15
 Leu Ile Gly Trp Arg Asp Met Gln His Ala Leu Asp Phe Leu Phe Ala
 20 25 30
 Asp Gly Gln Met Lys Ser Gly Thr Leu Val Ala Ile Asn Ala Glu Lys
 35 40 45
 Met Leu Ala Val Glu Asp Asn Ala Glu Val Lys Ser Leu Ile Glu Ala
 50 55 60
 Ala Glu Phe Lys Tyr Pro Ala Gly Ile Ser Val Val Arg Ser Ile Arg
 65 70 75 80
 Lys Lys Phe Pro His Ala Gly Val Cys Ser Arg
 85 90

<210> 2423
 <211> 371
 <212> DNA
 <213> Homo sapiens

<400> 2423
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 gagctcaacg ccaagcacia gaagatattg gaaggtcttc tacggcatcc tgagaataga
 120

gaatgcgcag actgcaagtc aaagggctcct cgaaggggcaa gtgtgaatct aggtatcttt
 180
 atatgcata catgttctgg cattcataga agcctggggg tgcacatatc taaggtaaga
 240
 tctgccacc tggatacatg gctgccagag caagttgcat ttattcaatc aatgggaaac
 300
 gaaaaagcaa atagctattg ggaagcagag ctgcctccta actacgatag ggttgaata
 360
 gagaattga t
 371

<210> 2424
 <211> 112
 <212> PRT
 <213> Homo sapiens

<400> 2424
 Met Asn Glu Lys Ala Ser Val Ser Lys Glu Leu Asn Ala Lys His Lys
 1 5 10 15
 Lys Ile Leu Glu Gly Leu Leu Arg His Pro Glu Asn Arg Glu Cys Ala
 20 25 30
 Asp Cys Lys Ser Lys Gly Pro Arg Trp Ala Ser Val Asn Leu Gly Ile
 35 40 45
 Phe Ile Cys Met Thr Cys Ser Gly Ile His Arg Ser Leu Gly Val His
 50 55 60
 Ile Ser Lys Val Arg Ser Ala Thr Leu Asp Thr Trp Leu Pro Glu Gln
 65 70 75 80
 Val Ala Phe Ile Gln Ser Met Gly Asn Glu Lys Ala Asn Ser Tyr Trp
 85 90 95
 Glu Ala Glu Leu Pro Pro Asn Tyr Asp Arg Val Gly Ile Glu Asn Leu
 100 105 110

<210> 2425
 <211> 411
 <212> DNA
 <213> Homo sapiens

<400> 2425
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 ccgctcctga acggctacga gatgacctgc cgctgctgcg aacatgaagc cncgccatg
 120
 acctccccgc ctgcacgggg gttcggtttc accgcccacg cccagcccga ggaacgcccc
 180
 cgctgcaagg aagccggcat gaacgactgc ctgttcaagc ccatcagcct gaccaccctc
 240
 aaccagaaac tcgccgacgt cagcgcgcgc ccgctgccga gccaggccgc cttcagcctc
 300
 gacggcctgc acgcctgac cgggggagag ccgctgctga tgcgtcgctt gatcgacgag
 360
 ctgctgagca gttgccaggc ggcccgcgag gcaactgctc gactgcccac c
 411

<210> 2426

<211> 137
 <212> PRT
 <213> Homo sapiens

<400> 2426
 Thr Gly Leu Gln Ala Trp Lys Asp Gly His Phe Asp Leu Val Ile Val
 1 5 10 15
 Asp Cys Asn Met Pro Val Leu Asn Gly Tyr Glu Met Thr Arg Arg Leu
 20 25 30
 Arg Glu His Glu Ala Xaa Ala Met Thr Ser Arg Pro Ala Arg Gly Phe
 35 40 45
 Gly Phe Thr Ala His Ala Gln Pro Glu Glu Arg Pro Arg Cys Lys Glu
 50 55 60
 Ala Gly Met Asn Asp Cys Leu Phe Lys Pro Ile Ser Leu Thr Thr Leu
 65 70 75 80
 Asn Gln Lys Leu Ala Asp Val Thr Pro Arg Pro Arg Pro Ser Gln Ala
 85 90 95
 Ala Phe Ser Leu Asp Gly Leu His Ala Leu Thr Gly Gly Glu Pro Leu
 100 105 110
 Leu Met Arg Arg Leu Ile Asp Glu Leu Leu Ser Ser Cys Gln Ala Ala
 115 120 125
 Arg Glu Ala Leu Leu Gly Leu Pro Ile
 130 135

<210> 2427
 <211> 293
 <212> DNA
 <213> Homo sapiens

<400> 2427
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 120
 ggagcccaac aagaaagatg ttgtgtccct cctggtgagc gctgtccccg tgcacccgat
 180
 aatggcgaag aaaatgtgcc tctttcagga aaagtatagg aaatgagaga agactgtgac
 240
 aactcatgac ctgcatcett aatatccagt gacttcatct ccccttcacg cgt
 293

<210> 2428
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 2428
 His Asn Lys Gly Leu Gly Ile Leu Val Pro Cys Ala Ile Xaa Ala Ala
 1 5 10 15
 Phe Leu Leu Ile Trp Ser Val Lys Cys Cys Arg Ala Gln Leu Glu Ala
 20 25 30
 Arg Arg Ser Arg His Pro Ala Asp Gly Ala Gln Gln Glu Arg Cys Cys
 35 40 45
 Val Pro Pro Gly Glu Arg Cys Pro Ser Ala Pro Asp Asn Gly Glu Glu

50 55
 Asn Val Pro Leu Ser Gly Lys Val
 65 70

60

<210> 2429
 <211> 428
 <212> DNA
 <213> Homo sapiens

<400> 2429
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 atcgccgaga tggcggggct acagggtgct cagtcgatcc gggaatcctt gaacaaggct
 120
 gatgtcctgc tcaatgggggt agagacgtcg accgggtccgc agccgggtgc gcttgctttg
 180
 ctggaacagg ccgtacatga gctggatggc actgggggatg ctgactctcg cgccgctgag
 240
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 300
 ggccatgcgg ctcgggctga agctgatccg caacggccttg aggaattggg gggctcgttg
 360
 gcggctattc agcggctggt gagggcgcg accaccacc tcgacgatct cctcgactcc
 420
 actgcggc
 428

<210> 2430
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 2430
 Ser Arg Arg Val Gly Glu Val Asp Ala Val Asp Pro Lys Pro His Glu
 1 5 10 15
 Asp Asp Asp Leu Ile Ala Glu Met Ala Gly Leu Gln Ala Ala Gln Ser
 20 25 30
 Ile Arg Glu Ser Leu Asn Lys Ala Asp Val Leu Leu Asn Gly Val Glu
 35 40 45
 Thr Ser Thr Gly Pro Gln Pro Gly Ala Leu Ala Leu Leu Glu Gln Ala
 50 55 60
 Val His Glu Leu Asp Gly Thr Gly Asp Ala Asp Pro Arg Ala Ala Glu
 65 70 75 80
 Leu Ala Glu Arg Ala Arg Gln Met Ser Tyr Asp Leu Thr Asp Leu Ala
 85 90 95
 Ala Ser Val Ala Gly His Ala Ala Arg Ala Glu Ala Asp Pro Gln Arg
 100 105 110
 Leu Glu Glu Leu Gly Gly Arg Leu Ala Ala Ile Gln Arg Leu Leu Arg
 115 120 125
 Ala Arg Thr Thr Thr Leu Asp Asp Leu Leu Asp Ser Thr Ala
 130 135 140

<210> 2431
 <211> 409

<212> DNA

<213> Homo sapiens

<400> 2431

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 atagtcgggtt aaatagggat ttctatgggt caatttatta ttcaagtggt ctgccagtta
 120
 aatggcgagg taacaatttc tggggcaaaa aatgccgcat taccaatcct atttgctact
 180
 ttattatctg aggggtgatat caatttaagc aatgtaccgc ttttaaaaga tattgccacc
 240
 actatcgagt tgtaaaaaga gctgggtgct actgtactc agactcaaca ctgcgtgcat
 300
 attaatgcga aagaagttaa gaactatact gcttcttatg aattagttag aagtatgcgt
 360
 gcttcaattt tggcattagg tccattgggt gctcggttcg gtgaagctt
 409

<210> 2432

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2432

Met	Gly	Gln	Phe	Ile	Ile	Gln	Gly	Gly	Cys	Gln	Leu	Asn	Gly	Glu	Val
1				5					10					15	
Thr	Ile	Ser	Gly	Ala	Lys	Asn	Ala	Ala	Leu	Pro	Ile	Leu	Phe	Ala	Thr
			20					25					30		
Leu	Leu	Ser	Glu	Gly	Asp	Ile	Asn	Leu	Ser	Asn	Val	Pro	Leu	Leu	Lys
			35					40				45			
Asp	Ile	Ala	Thr	Thr	Ile	Glu	Leu	Leu	Lys	Glu	Leu	Gly	Ala	Thr	Ala
			50				55				60				
Thr	Gln	Thr	Gln	His	Cys	Val	His	Ile	Asn	Ala	Lys	Glu	Val	Lys	Asn
65					70					75				80	
Tyr	Thr	Ala	Ser	Tyr	Glu	Leu	Val	Arg	Ser	Met	Arg	Ala	Ser	Ile	Leu
				85					90					95	
Ala	Leu	Gly	Pro	Leu	Val	Ala	Arg	Phe	Gly	Glu	Ala				
			100						105						

<210> 2433

<211> 655

<212> DNA

<213> Homo sapiens

<400> 2433

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 aggcctacacc acacagccga ggcggtgtgga ggactatacc atctgggttt acgtaagtgc
 120
 gctctatgat gctcacgtaa caatgaaatc acggaatctc tctctcagaa catttccccg
 180
 ttgtgaagca gcacgtgact ataattcttt cccaggttta cccctgaagt tcaagtgcga
 240

tgccctgca cagcacagag caggggacga taggaggcgt gccttctcca gctgaaccac
 300
 cgggcccagcc gggcgggcag tgggggttgg ggggagggtt gacccattgg tgetgccagc
 360
 accaaagaga caggatcttg gagagagtga ggctctctgt caggggacga tgaaggccca
 420
 atctggggac atcagggaag gcagcaaggg tctggctgat tgtgcaaaaa gaactttttc
 480
 tgtgactgcc gtgttccaaa cacacctttt gcttttataa aaacccaac tgggagggtt
 540
 agcaaaaggc acagtttcag agcataataa agacagagca gaatgggaga ggaggttaat
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 caaatgggcc atcactcaat gcaggggagg gaggggtgtg ctcaggacaa cgcgt
 655

<210> 2434

<211> 137

<212> PRT

<213> Homo sapiens

<400> 2434

Met Ala His Leu Ile Asn Leu Leu Ser His Ser Ala Leu Ser Leu Leu
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 Cys Ser Glu Thr Val Pro Phe Ala Lys Pro Pro Ser Leu Gly Phe Cys
 20 25 30
 Lys Ser Lys Gly Cys Val Trp Asn Thr Ala Val Thr Glu Lys Val Leu
 35 40 45
 Phe Ala Gln Ser Ala Arg Pro Leu Leu Leu Ser Leu Met Ser Pro Asp
 50 55 60
 Trp Ala Phe Ile Val Pro Cys Thr Glu Ala Ser Leu Ser Pro Arg Ser
 65 70 75 80
 Cys Leu Phe Gly Arg Gly Ser Thr Asn Gly Ser Thr Leu Pro Pro Thr
 85 90 95
 Pro Thr Ala Arg Pro Ala Gly Pro Val Val Gln Leu Glu Lys Ala Arg
 100 105 110
 Leu Leu Ser Ser Pro Ala Leu Cys Cys Ala Gly Ala Leu His Leu Asn
 115 120 125
 Phe Arg Gly Lys Pro Gly Lys Arg Leu
 130 135

<210> 2435

<211> 401

<212> DNA

<213> Homo sapiens

<400> 2435

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 60
 aacgtgctgc gtacctccat ggaactgggc ngcaatgccc cattcattgt ctttggaggc
 120
 gcagatatgg accaagcggc ccagggtgag atgggagcca agatgcgcaa tatcggcagc
 180
 gctgcaccg cagctaaccg cttcttggtc cagcagtcgt ttgctgagga gttctctgag
 240

aaactcgttg cggagtttga gaagctcaat ctgggcaatg gtagggacga aggtattacc
 300
 tgcggacctc tcgtcgagtc caaggctttg gagagcattg cggcattggg ggacgatgct
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 401

<210> 2436

<211> 133

<212> PRT

<213> Homo sapiens

<400> 2436

Lys	Leu	Ser	Phe	Thr	Gly	Ser	Thr	Pro	Val	Gly	Arg	Thr	Leu	Leu	Lys
1				5				10						15	
Xaa	Ala	Ala	Asp	Asn	Val	Leu	Arg	Thr	Ser	Met	Glu	Leu	Gly	Xaa	Asn
			20					25					30		
Ala	Pro	Phe	Ile	Val	Phe	Glu	Asp	Ala	Asp	Ile	Asp	Gln	Ala	Val	Gln
		35				40					45				
Gly	Ala	Met	Gly	Ala	Lys	Met	Arg	Asn	Ile	Gly	Glu	Ala	Cys	Thr	Ala
50					55					60					
Ala	Asn	Arg	Phe	Leu	Val	His	Glu	Ser	Val	Ala	Glu	Glu	Phe	Ser	Glu
65				70					75				80		
Lys	Leu	Val	Ala	Glu	Phe	Glu	Lys	Leu	Asn	Leu	Gly	Asn	Gly	Met	Asp
			85					90					95		
Glu	Gly	Ile	Thr	Cys	Gly	Pro	Leu	Val	Glu	Ser	Lys	Ala	Leu	Glu	Ser
			100				105						110		
Ile	Ala	Ala	Leu	Val	Asp	Asp	Ala	Ala	Glu	Lys	Gly	Ala	Thr	Ile	Ser
			115				120						125		
Thr	Gly	Gly	Lys	Arg											
			130												

<210> 2437

<211> 449

<212> DNA

<213> Homo sapiens

<400> 2437

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 120
 atggtagtga tttttcaagc tagacgttca taatggtaga acatgaggag gaaaaactgcc
 180
 tcttaaatcc caccacttac tgtgacacag tgaccggtcc ctgcagcgga ctggatagtt
 240
 gtagcagagt cctggacgga aacagatggc actcaaaaagg tggcgcgag ttcagagaaa
 300
 tgcctatgta cggatttggt ccaatgcctc agcctgacct cagggacctt cgggggtctg
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 420
 agttccagtc atttcatttt atcgtctgtg
 449

<210> 2438
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 2438
 Met Val Glu His Glu Glu Glu Asn Cys Leu Leu Asn Pro Thr Thr Tyr
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 Cys Asp Thr Val Thr Gly Pro Cys Ser Gly Leu Asp Ser Cys Ile Arg
 20 25 30
 Val Leu Asp Gly Asn Arg Trp His Ser Lys Gly Gly Ala Gln Phe Arg
 35 40 45
 Glu Met Pro Met Tyr Gly Phe Gly Pro Met Pro Gln Pro Asp Leu Arg
 50 55 60
 Asp Leu Arg Gly Ser Ala Pro Arg Pro Pro Leu His Ile Cys Asp Pro
 65 70 75 80
 Thr His Phe His Pro Ser Ala Thr Phe Lys Phe Gln Ser Phe His Phe
 85 90 95
 Ile Ala Val

<210> 2439
 <211> 4425
 <212> DNA
 <213> Homo sapiens

<400> 2439
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 120
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 180
 ctgagggggcc gtgagccaga gggcgtctgg aacctgctaa gcattgtgct ggagatgttc
 240
 aagcggaggg acagcaatgc tcccccttgg ttggaatccc tcaactgacca gtgcctcacc
 300
 tatgaacaga taacaggttg gtggtatagc gtacgtacct cagcctcaca cagcagtgcc
 360
 agtggggcaca cgggcgctag caacgggcag tcagaggtgg cagcccatgc ctgtgccagc
 420
 atgtgtgacg agatggtcac actgtggagg ctggccgtgc tggaccctgc actcagcccc
 480
 cagcggcgcc gggaactgtg tacgcagctg cggcagtgcc aactgaaggt gattgagAAC
 540
 gtcaagcggg gccaacacaa gaagacgctg gagcggctct tccccggctt ccggccagcg
 600
 gtggaggcct gctacttcaa ctgggaagag gcctaccacc ttctgtgtgt cacctacagc
 660
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 720
 tccgctctg ggggcctgga ggaatcccg gaccggcccc gacccttccc tactgagcca
 780

gctgtgcggc ccaaggagcc tgggaccaag cgaaagggct tgggtgaggg ggtccctca
840
tcacagcggg gtcccgccg cctctcagct gaagggggag ataaagctct acataagatg
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960
gcaggtggcg gaagcaagcg acggctgagc agcgaagaca gctccctgga gccagacctg
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gccgagatga gcctggatga cagcagcctg gccctgggcg cagaggccag caccttcggg
1080
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1140
ttccttctct agccccaga tacttatgaa gaagatgggt gtgtgtactt ctcggaaggg
1200
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<210> 2440

<211> 1306

<212> PRT

<213> Homo sapiens

<400> 2440

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		20					25						30		
Val	Val	Phe	Ser	Asp	Val	Asn	Ser	Met	Tyr	Leu	Ser	Ser	Thr	Glu	Pro
		35				40						45			
Pro	Ala	Ala	Ala	Glu	Trp	Ala	Cys	Leu	Leu	Arg	Pro	Leu	Arg	Gly	Arg
	50				55					60					
Glu	Pro	Glu	Gly	Val	Trp	Asn	Leu	Leu	Ser	Ile	Val	Arg	Glu	Met	Phe
65				70					75					80	
Lys	Arg	Arg	Asp	Ser	Asn	Ala	Ala	Pro	Leu	Leu	Glu	Ile	Leu	Thr	Asp
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Gln	Cys	Leu	Thr	Tyr	Glu	Gln	Ile	Thr	Gly	Trp	Trp	Tyr	Ser	Val	Arg
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Thr	Ser	Ala	Ser	His	Ser	Ser	Ala	Ser	Gly	His	Thr	Gly	Arg	Ser	Asn
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Gly	Gln	Ser	Glu	Val	Ala	Ala	His	Ala	Cys	Ala	Ser	Met	Cys	Asp	Glu
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Met	Val	Thr	Leu	Trp	Arg	Leu	Ala	Val	Leu	Asp	Pro	Ala	Leu	Ser	Pro
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Gln	Arg	Arg	Arg	Glu	Leu	Cys	Thr	Gln	Leu	Arg	Gln	Trp	Gln	Leu	Lys
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Val	Ile	Glu	Asn	Val	Lys	Arg	Gly	Gln	His	Lys	Lys	Thr	Leu	Glu	Arg
		180					185						190		
Leu	Phe	Pro	Gly	Phe	Arg	Pro	Ala	Val	Glu	Ala	Cys	Tyr	Phe	Asn	Trp
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Glu	Glu	Ala	Tyr	Pro	Leu	Pro	Gly	Val	Thr	Tyr	Ser	Gly	Thr	Asp	Arg
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Lys	Leu	Ala	Leu	Cys	Trp	Ala	Arg	Ala	Leu	Pro	Ser	Arg	Pro	Gly	Ala
225				230					235					240	
Ser	Arg	Ser	Gly	Gly	Leu	Glu	Glu	Ser	Arg	Asp	Arg	Pro	Arg	Pro	Leu
			245					250						255	
Pro	Thr	Glu	Pro	Ala	Val	Arg	Pro	Lys	Glu	Pro	Gly	Thr	Lys	Arg	Lys

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Glu Lys Gly Asp Leu	Ala Leu Ala Leu Met Ile Thr Tyr Lys Asp Asp				
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Gln Ala Lys Leu Lys Lys Ile Leu Asp Lys Leu Leu Asp Arg Glu Ser					
	725		730		735
Gln Thr His Lys Pro Gln Thr Leu Ser Ser Phe Tyr Ser Ser Ser Arg					
	740		745		750
Pro Thr Thr Ala Ser Gln Arg Ser Pro Ser Lys His Gly Gly Pro Ser					
	755		760		765
Ala Pro Gly Ala Leu Gln Pro Leu Thr Ser Gly Ser Ala Gly Pro Ala					
	770		775		780
Gln Pro Gly Ser Val Ala Gly Ala Gly Pro Gly Pro Thr Glu Gly Phe					
785	790		795		800
Thr Glu Lys Asn Val Pro Glu Ser Ser Pro His Ser Pro Cys Glu Gly					
	805		810		815
Leu Pro Ser Glu Ala Ala Leu Thr Pro Arg Pro Glu Gly Lys Val Pro					
	820		825		830
Ser Arg Leu Ala Leu Gly Ser Arg Gly Gly Tyr Asn Gly Arg Gly Trp					
	835		840		845
Gly Ser Ser Gly Arg Pro Lys Lys Lys His Thr Gly Met Ala Ser Ile					
	850		855		860
Asp Ser Ser Ala Pro Glu Thr Thr Ser Asp Ser Ser Pro Thr Leu Ser					
	865		870		875
Arg Arg Pro Leu Arg Gly Gly Trp Ala Pro Thr Ser Trp Gly Arg Gly					
	885		890		895
Gln Asp Ser Asp Ser Ile Ser Ser Ser Ser Asp Ser Leu Gly Ser					
	900		905		910
Ser Ser Ser Ser Gly Ser Arg Ala Ala Ser Ala Ser Gly Gly Ala Arg					
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Ala Lys Thr Val Glu Val Gly Arg Tyr Lys Gly Arg Arg Pro Glu Ser					
	930		935		940
His Ala Pro His Val Pro Asn Gln Pro Ser Glu Ala Ala Ala His Phe					
	945		950		955
Tyr Phe Glu Leu Ala Lys Thr Val Leu Ile Lys Ala Gly Gly Asn Ser					
	965		970		975
Ser Thr Ser Ile Phe Thr His Pro Ser Ser Ser Gly Gly His Gln Gly					
	980		985		990
Pro His Arg Asn Leu His Leu Cys Ala Phe Glu Ile Gly Leu Tyr Ala					
	995		1000		1005
Leu Gly Leu His Asn Phe Val Ser Pro Asn Trp Leu Ser Arg Thr Tyr					
	1010		1015		1020
Ser Ser His Val Ser Trp Ile Thr Gly Gln Ala Met Glu Ile Gly Ser					
	1025		1030		1035
Ala Ala Leu Thr Ile Leu Val Glu Cys Trp Asp Gly His Leu Thr Pro					
	1045		1050		1055
Pro Glu Val Ala Ser Leu Ala Asp Arg Ala Ser Arg Ala Arg Asp Ser					
	1060		1065		1070
Asn Met Val Arg Ala Ala Ala Glu Leu Ala Leu Ser Cys Leu Pro His					
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Ala His Ala Leu Asn Pro Asn Glu Ile Gln Arg Ala Leu Val Gln Cys					
	1090		1095		1100
Lys Glu Gln Asp Asn Leu Met Leu Glu Lys Ala Cys Met Ala Val Glu					
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Thr Ala Arg Glu Gly Ala Thr Ser Cys Ser Ala Ser Gly Ile Arg Ala
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Gly Gly Glu Ala Gly Arg Gly Met Pro Glu Gly Arg Gly Gly Pro Gly
1170          1175          1180
Thr Glu Pro Val Thr Val Ala Ala Ala Val Thr Ala Ala Thr
1185          1190          1195          1200
Val Val Pro Val Ile Ser Val Gly Ser Ser Leu Tyr Pro Gly Pro Gly
1205          1210          1215
Leu Gly His Gly His Ser Pro Gly Leu His Pro Tyr Thr Ala Leu Gln
1220          1225          1230
Pro His Leu Pro Cys Ser Pro Gln Tyr Leu Thr His Pro Ala His Pro
1235          1240          1245
Ala His Pro Met Pro His Met Pro Arg Pro Ala Val Phe Pro Val Pro
1250          1255          1260
Ser Ser Ala Tyr Pro Gln Val Arg Pro Val Phe Cys Trp Gly Val Arg
1265          1270          1275          1280
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<210> 2441

<211> 2244

<212> DNA

<213> Homo sapiens

<400> 2441

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600
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660
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720

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<210> 2442

<211> 168

<212> PRT

<213> Homo sapiens

<400> 2442

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Pro Ile Ser Cys Trp Gly Pro Ser Thr Cys Leu Cys Pro Trp Leu Cys
           20           25           30
Pro Ser Ala Asn Pro Ser Pro Pro Gly Ser His Pro Gln Leu Pro
           35           40           45
Ala Arg Ser Pro Leu Pro Gly Pro Leu Pro Ser Pro Trp Cys Ser Leu
           50           55           60
Ser Gln Gly Pro Ser Pro Ser Asp Phe Pro Gln Gly Ser Arg Leu Asp
65           70           75           80
Leu Glu Leu Cys Leu Pro Val Cys Ala Met Gly Ser Ala Ser Gly Leu
           85           90           95
Glu Leu Arg Leu Phe Pro Gly Pro Gly Gln Gly Arg Pro Pro Leu Gly
           100          105          110
Gly Ala Gly Ala Glu Leu Leu Arg Pro Glu Asp Tyr Ser Asp Arg Glu
           115          120          125
Pro Val Phe Asp Leu Ser Val Pro Leu Asn Lys Gln Gln Lys Pro Lys
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Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
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Lys Lys Lys Lys Lys Lys Lys
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<210> 2443

<211> 361

<212> DNA

<213> Homo sapiens

<400> 2443

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<210> 2444

<211> 120

<212> PRT

<213> Homo sapiens

<400> 2444

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Xaa Val Arg Ala Ile Leu Arg Arg Thr Pro Ser Arg Glu Asp Glu Lys
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Met Leu Gln Thr Ala Asp Gly Arg Leu Arg Ile Asp Ile Glu Ser Met
          20           25           30
Arg Thr Phe Val Glu Gly Lys Glu Val His Leu Thr Lys Asn Glu Phe
          35           40           45
Leu Ile Val Gln Thr Leu Phe Thr His Pro Asn Lys Ile Tyr Thr Arg
          50           55           60
Asp Glu Ile Ile Glu Val Thr Phe Gly Met Asp Tyr Glu Ala Phe Asp
65           70           75           80
Arg Ala Ile Asp Thr His Ile Lys Asn Ile Arg Gln Lys Ile Glu Ala
          85           90           95
Asp Pro Lys Asn Pro Val Tyr Ile Arg Thr Val Tyr Gly Val Gly Tyr
          100          105          110
Leu Pro Gly Gly Phe Asp Glu Ala
          115          120

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<210> 2445

<211> 403

<212> DNA

<213> Homo sapiens

<400> 2445

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120
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180
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240
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300
caagcttatta gagttaataa cagtgcactg gcattccttc aaaatcctaa tggaaagcata
360
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403

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<210> 2446

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2446

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Met Glu Lys Glu His Arg Thr Lys Arg Lys His Val Tyr Pro Val Gln
 1           5           10           15
Ile Thr Ala Ser Ala Arg Leu Leu Leu Leu Gly Ser Ala His Leu
          20           25           30
Leu Phe Ile Lys Gln Met Ser Glu Leu Gly Ala Gly Lys Gly Ile Pro
          35           40           45
Cys Ile Tyr Thr Gly Lys Pro Glu Ser Gln Arg Ala Pro Asn His Pro
          50           55           60
Gly Cys Glu Gly Gln Ala Ile Arg Val Asn Asn Ser Ala Leu Ala Phe

```

```

65              70              75              80
Leu Gln Asn Pro Asn Gly Ser Ile Asn Lys Lys Arg Lys Val Pro Phe
            85              90              95
Thr Gln Glu Pro Glu Lys
            100

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<210> 2447
<211> 744
<212> DNA
<213> Homo sapiens

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<400> 2447
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660
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744

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<210> 2448
<211> 248
<212> PRT
<213> Homo sapiens

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<400> 2448
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      20      25      30
Ser Thr Leu Asp Thr Leu Leu Gly Leu Gly Val Val Pro Ile Val Asn
      35      40      45
Glu Asn Asp Thr Val Ala Thr Gly Glu Ile Arg Phe Gly Asp Asn Asp
      50      55      60
Arg Leu Ala Ala Leu Val Ala Glu Leu Val Arg Ala Gln Ala Leu Ile

```



```

65              70              75              80
Leu Leu Ser Asp Val Asp Ala Leu Tyr Thr Ala His Pro Asp Ser Pro
      85              90              95
Asp Ala Arg Arg Val Glu Val Val Glu Asp Ile Asp Ala Leu Asp Val
      100              105              110
Asp Thr His Lys Ala Gly Ser Gly Val Gly Thr Gly Gly Met Thr Thr
      115              120              125
Lys Leu Glu Ala Ala Arg Met Ala Thr Cys Ala Gly Val Pro Val Val
      130              135              140
Leu Ala Ala Ala Val Asp Ala Pro Asp Val Leu Ala Gly Ala Pro Val
145              150              155              160
Gly Thr Tyr Phe Arg Pro Leu Ala Thr Arg Arg Pro Arg Arg Leu Leu
      165              170              175
Trp Leu Ala Asp Ala Ala Thr Pro Gln Gly Gln Ile Val Ile Asp Asp
      180              185              190
Gly Ala Val Glu Ala Leu Thr Gln Arg His Ser Ser Leu Leu Ala Val
      195              200              205
Gly Val Thr Arg Val His Gly Asp Phe Gln Ala Gly Asp Pro Val Thr
      210              215              220
Ile Leu Ala Ser Asp Gly Arg Val Val Gly Arg Gly Ile Ala Gln Phe
225              230              235              240
Ser His Asp Glu Val Arg Val Met
      245

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<210> 2449

<211> 296

<212> DNA

<213> Homo sapiens

<400> 2449

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gtgcactttg ttacagccct ggaacatgaa cacatgccgt catcaactcc caaaaatctc
60
ctactgctct cccctectcc ctgggcccctg tcctatcccc agaggccaga caggccttcc
120
tcgcattcaa gagtctccct cgccctgcgc gacagtggcc tccatctacc tgccctgtctt
180
gctggactcc agaactcc agtcctttcc cccttggggg ttgggggggg ccccccttt
240
tttcccccc ctttccctct tcattccaca ggaggccagc ctcaacatcc cncccc
296

```

<210> 2450

<211> 90

<212> PRT

<213> Homo sapiens

<400> 2450

```

Met Asn Thr Cys Arg His Gln Leu Pro Lys Ile Ser Tyr Cys Ser Pro
1              5              10              15
Leu Leu Pro Gly Pro Cys Pro Ile Pro Arg Gly Gln Thr Gly Leu Pro
      20              25              30
Arg Met Gln Glu Ser Pro Ser Pro Cys Arg Thr Val Ala Ser Ile Tyr
      35              40              45
Leu Pro Val Leu Leu Asp Ser Arg Thr Leu Gln Ser Phe Pro Pro Trp

```

```

      50              55              60
Gly Leu Gly Gly Ala Pro Pro Phe Phe Pro Pro Leu Ser Leu Phe Ile
65              70              75              80
Pro Gln Glu Ala Ser Leu Asn Ile Pro Xaa
      85              90

```

```

<210> 2451
<211> 589
<212> DNA
<213> Homo sapiens

```

```

<400> 2451
nacgcgtgac tggattgctc aacgggtgag gaatcgagcg gttacgatgt cgggccgac
60
tgcaacgatg atcttgtgag cgatgtattg accggtgtgt gggccgatct tgtgggccag
120
gagaaggctg tcggggtcct gcgtcgtgcc gccgaatcgc agccggggcg ctgcgcccat
180acgcatggct cattacgggt ccgcctggat caggtcggtc gaatgctcgc      240
aaggcctttg cagcggcgct acagtgcgtc gaccatggat gcgggcagtg caatgcctgt
300
cgaaccngcc tgtcaggcgc ccatacctgac gtcaccctcg tcgctactga ggcgctgtct
360
attggcgctg attgaggtcg tgaatatgggt ttgttcgagc gggcgatgaa ttcgggtccc
420
cgggggcgctcc ccagggttgt cgtcgtcgaa gatgccgacc gcatcactga acgcgagagt
480
gacgcctttg ttaaaagctat cgaggagcct gcgccgaaaa ccgtctgtgt gctgtgtgccc
540
cctactccag aggacgtcat cgtcacgacg aggtcgagat gtcggcgccc
589

```

```

<210> 2452
<211> 121
<212> PRT
<213> Homo sapiens

```

```

<400> 2452
Leu Asp Cys Ser Thr Gly Glu Glu Ser Ser Gly Tyr Asp Val Gly Pro
1              5              10              15
Ile Cys Asn Asp Asp Leu Val Ser Asp Val Leu Thr Gly Val Trp Ala
20              25              30
Asp Leu Val Gly Gln Glu Lys Ala Val Gly Val Leu Arg Arg Ala Ala
35              40              45
Glu Ser Gln Pro Gly Arg Ser Ser His Ala Met Ser His Ala Trp Leu
50              55              60
Ile Thr Gly Pro Pro Gly Ser Gly Arg Ser Asn Ala Ala Lys Ala Phe
65              70              75              80
Ala Ala Ala Leu Gln Cys Val Asp His Gly Cys Gly Gln Cys Asn Ala
85              90              95
Cys Arg Thr Xaa Leu Ser Gly Ala His Pro Asp Val Thr Leu Val Arg
100              105              110
Thr Glu Ala Leu Ser Ile Gly Val Asp
115              120

```

<210> 2453
 <211> 695
 <212> DNA
 <213> Homo sapiens

<400> 2453
 nnacgcgtca gccatctgtg agtgcacaca ctatacacac atccccgggc aactcaggg
 60
 agattcacac attcctacga gcacacatgt gcctgcacga gttattcccc atgtgaacac
 120
 acagggttggc acacgcacat gcccctgggt atgctcatgt ccattcatcc atccccgcct
 180
 gtgcacgtcc tctcactcct gtgttcacac ctatgcccaa atgaaccaag ggacacacat
 240
 gcacaccctt atgtggtgca cacacactcg tgcacacgga gccacaccag cacatgctca
 300
 gaggcatttg tgtgcgtggg catttgacgc atgactcaga acggagtatg ggggtggcgg
 360
 gcgtggctgg ggaggtccca tcagcccgcc tctgaaaccc tcccaacctg cccatcctgg
 420
 ccaggcact gtgtctccgg cttgggcttc agccccggac cccaggacac cccggacaaa
 480
 gaggagctgc tctcgtctga agcctgctac gaatgcagga tcaatggcct ctcccctgg
 540
 gaccggccac gacgcagtgc ccacaggag caccagggtga catgggtgct gcactaggga
 600
 ggggtggcca gggaatgggt gagtgtggga aagaggctgt ggacccgact tagtcatgtc
 660
 agcccccca agaaggagca ccaggctcca gatct
 695

<210> 2454
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 2454
 Met Ser Tyr Ser Pro Cys Glu His Thr Gly Trp His Thr His Met Pro
 1 5 10 15
 Leu Gly Met Leu Met Ser Ile His Pro Ser Gln Pro Val His Val Leu
 20 25 30
 Ser Leu Leu Cys Ser His Leu Cys Pro Asn Glu Pro Arg Asp Thr His
 35 40 45
 Ala His Pro Tyr Val Val His Thr His Ser Cys Thr Arg Ser His Thr
 50 55 60
 Ser Thr Cys Ser Glu Ala Phe Val Cys Val Gly Ile Cys Ser Met Thr
 65 70 75 80
 Gln Asn Gly Val Trp Gly Gly Ala Ala Trp Leu Gly Arg Ser His Gln
 85 90 95
 Pro Ala Ser Glu Thr Leu Pro Thr Cys Pro Ser Trp Pro Arg His Cys
 100 105 110
 Val Ser Gly Leu Gly Phe Ser Pro Gly Pro Gln Asp Thr Pro Asp Lys
 115 120 125
 Glu Glu Leu Leu Ser Ser Glu Ala Cys Tyr Glu Cys Arg Ile Asn Gly

```

      130                      135                      140
Leu Ser Pro Arg Asp Arg Pro Arg Arg Ser Ala His Arg Asp His Gln
145                      150                      155                      160
Val Thr Trp Val Leu His
      165

```

<210> 2455
 <211> 378
 <212> DNA
 <213> Homo sapiens

```

<400> 2455
acgcgtcggc agaagcgta gctgaccgtc ggagccgac tgccccagg cgtcgtcagc
60
ggaaccgcgc agaaggaat ccacgcgctg ccgatcatga aggcgctccc catgggcgtc
120
aaagaactgc ttctgggcga atcgaagtgg caggacgagt tgatcaacaa cttcatcgtc
180
gcgctgtttg caggcggtgt gttgctgttc gcggtgctgg tgctgctgta ccggcgcttg
240
ctgcgcgcgt tcatcaacgt gatgtcgtg gcggtggcac cgctgggcgg gttgatcggc
300
ctgtggcgta ccaacacgcc gatctcgatg ccggtctata tcggcttgat catgctgctc
360
ggcatcgtcg ccaagaat
378

```

<210> 2456
 <211> 126
 <212> PRT
 <213> Homo sapiens

```

<400> 2456
Thr Arg Arg Gln Lys Arg Gln Leu Thr Val Gly Ala Asp Leu Ser Pro
1      5      10      15
Gly Val Val Ser Gly Thr Ala Gln Lys Glu Ile His Ala Leu Pro Ile
20     25     30
Met Lys Ala Leu Pro Met Gly Val Lys Glu Leu Val Leu Gly Glu Ser
35     40     45
Lys Trp Gln Asp Glu Leu Ile Asn Asn Phe Ile Val Ala Leu Phe Ala
50     55     60
Gly Val Val Leu Leu Phe Ala Val Leu Val Leu Tyr Arg Arg Leu
65     70     75     80
Leu Pro Pro Phe Ile Asn Val Met Ser Leu Ala Val Ala Pro Leu Gly
85     90     95
Gly Leu Ile Gly Leu Trp Leu Thr Asn Thr Pro Ile Ser Met Pro Val
100    105    110
Tyr Ile Gly Leu Ile Met Leu Leu Gly Ile Val Ala Lys Asn
115    120    125

```

<210> 2457
 <211> 754
 <212> DNA
 <213> Homo sapiens

<400> 2457
 cctaggaatt taccaccatc aaagacttac attaaccagc tatccatgaa ctcacctgag
 60
 atgagcgaat gtgacatctt gcacactctg cgtgggtctt ctcggtccg gatcagctcc
 120
 tatgtcaact ggataaagga tcaccttatt aaacagggaa tgaaggctga gcatgctagc
 180
 tcgcttctag aactggcatc caccactaag tgtagctcag tgaatatga tgttgaata
 240
 gtagaggaat acttcgctcg acagatctca tccttctgta gtatcgactg tgccaccatc
 300
 ttgcagctgc atgaaattcc cagtctcgag tccatctaca ccttgatgc cgcgattcta
 360
 aaaggcccg gtcttttttg gatgagcatt tttctaagat ggctgctgag actgatcctc
 420
 ataagtcgtc tgagattacc aagaacctac ttccagccac gctgcaactc attgacacct
 480
 atgcctcgtt caccagagcc tatttgctgc aaaactttaa tgaagagggga acaactgaga
 540
 aaccttccaa ggagaaactg caaggctttg ctgctgtttt ggctattggc tctagcaggt
 600
 gcaaggcaaa tactctgggt ccgacactgg ttcagaattt gccatcgta gtgcgactg
 660
 tgtgtgagtc ctggaacaac atcaatacca atgaatttcc caatattgga tcctggcgca
 720
 atgcctttgc caatgacacc atcccttcac gcgt
 754

<210> 2458
 <211> 236
 <212> PRT
 <213> Homo sapiens

<400> 2458
 Met Asn Ser Pro Glu Met Ser Glu Cys Asp Ile Leu His Thr Leu Arg
 1 5 10 15
 Trp Ser Ser Arg Leu Arg Ile Ser Ser Tyr Val Asn Trp Ile Lys Asp
 20 25 30
 His Leu Ile Lys Gln Gly Met Lys Ala Glu His Ala Ser Ser Leu Leu
 35 40 45
 Glu Leu Ala Ser Thr Thr Lys Cys Ser Ser Val Lys Tyr Asp Val Glu
 50 55 60
 Ile Val Glu Glu Tyr Phe Ala Arg Gln Ile Ser Ser Phe Cys Ser Ile
 65 70 75 80
 Asp Cys Ala Thr Ile Leu Gln Leu His Glu Ile Pro Ser Leu Gln Ser
 85 90 95
 Ile Tyr Thr Leu Asp Ala Ala Ile Leu Lys Gly Pro Gly Leu Phe Gly
 100 105 110
 Met Ser Ile Phe Leu Arg Trp Leu Leu Arg Leu Ile Leu Ile Ser Arg
 115 120 125
 Leu Arg Leu Pro Arg Thr Tyr Phe Gln Pro Arg Cys Asn Ser Leu Thr
 130 135 140
 Pro Met His Arg Ser Pro Glu Pro Ile Cys Cys Lys Thr Leu Met Lys

```

145             150             155             160
Arg Glu Gln Leu Arg Asn Leu Pro Arg Arg Asn Cys Lys Ala Leu Leu
             165             170             175
Leu Phe Trp Leu Leu Ala Leu Ala Gly Ala Arg Gln Ile Leu Trp Val
             180             185             190
Arg His Trp Phe Arg Ile Cys His Arg Gln Cys Arg Leu Cys Val Ser
             195             200             205
Pro Gly Thr Thr Ser Ile Pro Met Asn Phe Pro Ile Leu Asp Pro Gly
             210             215             220
Ala Met Pro Leu Pro Met Thr Pro Ser Leu His Ala
225             230             235

```

<210> 2459

<211> 382

<212> DNA

<213> Homo sapiens

<400> 2459

```

accggtgcac agatcgcttct ggccgcgtgc actgccccgc tcaagcaaat cgctatcaac
60
gctggtctctt agggcggcgt cgtggctgag aaggtcgtg gtctgccccg aggacagggc
120
ctcaacgcgg ccaatgacga gtatgtcgac atggtagagg ccggcatcat tgacccggcc
180
aaggtgaccc gttcgctct gcagaacgcc gcgtccatcg cggcctgtt cctcaccact
240
gaagccgtca tcgctgacaa gcccgagcct gttaaggctc ccgtggcgg cggtgatatg
300
gacggtatgg gtggcatggg cggcatgatg tgatcgtgta ttgccttcgc tgatttgagt
360
gggatgccac ttgccccag gc
382

```

<210> 2460

<211> 110

<212> PRT

<213> Homo sapiens

<400> 2460

```

Thr Gly Ala Gln Ile Val Leu Ala Ala Cys Thr Ala Pro Leu Lys Gln
1             5             10             15
Ile Ala Ile Asn Ala Gly Leu Glu Gly Gly Val Val Ala Glu Lys Val
20             25             30
Ala Gly Leu Pro Ala Gly Gln Gly Leu Asn Ala Ala Asn Asp Glu Tyr
35             40             45
Val Asp Met Val Glu Ala Gly Ile Ile Asp Pro Ala Lys Val Thr Arg
50             55             60
Ser Ala Leu Gln Asn Ala Ala Ser Ile Ala Ala Leu Phe Leu Thr Thr
65             70             75             80
Glu Ala Val Ile Ala Asp Lys Pro Glu Pro Val Lys Ala Pro Ala Gly
85             90             95
Gly Gly Asp Met Asp Gly Met Gly Gly Met Gly Gly Met Met
100             105             110

```

<210> 2461
 <211> 558
 <212> DNA
 <213> Homo sapiens

<400> 2461
 tccggacaaa agggttcaat cgaagtatgg ttagcctttt ccaagtcgcc aggacggacc
 60
 tgcaatgctg tttgtcgta tgctcggggg caagcaccga cgggctaaaa tcgaaattca
 120
 cgatgtggta ttgcagtcg cggatacgt gcaacacacc tacaccaat tgcgcgacgg
 180
 ctgggttcggc agccctaagg tgtgcatac gatgcgtgga tggcgcgcga tggcgcgcac
 240
 ggctggaaa tcgaactcag ccagatggcg ccgctgccc acgcgcacga cctgtacttc
 300
 atcaacctcg gcggtacga ggccaacgct ttggcgagg cccatcatta cctgctgggtg
 360
 gtgcgccggg acaaacagga agccaagcgc aaggggcagc ggcaaatgtt gcaacactgg
 420
 tcccaggccc acaccgatgg cgtaatggat atcgacgact gcttgccgat tgatctgggtg
 480
 gacggtcgct atgttcacct ggtgcaaggc ccgcaccagc cgatcatcca gcacaacgac
 540
 tacatcatcc tgccgcga
 558

<210> 2462
 <211> 148
 <212> PRT
 <213> Homo sapiens

<400> 2462
 Met Val Ser Leu Phe Gln Val Ala Arg Thr Asp Leu Gln Cys Cys Leu
 1 5 10 15
 Ser Ser Cys Ser Gly Ala Ser Thr His Gly Leu Lys Ser Lys Phe Thr
 20 25 30
 Met Trp Tyr Ser Gln Ser Arg Ile Arg Cys Asn Thr Pro Thr Pro Asn
 35 40 45
 Cys Ala Thr Ala Gly Ser Ala Ala Leu Arg Cys Ala Tyr Arg Cys Val
 50 55 60
 Asp Gly Arg Arg Trp Arg Arg Leu Glu Ser Arg Thr Gln Pro Asp
 65 70 75 80
 Gly Ala Ala Cys Arg Arg Ala Ser Pro Val Leu His Gln Pro Arg Arg
 85 90 95
 Leu Arg Gly Gln Arg Phe Trp Arg Gly Pro Ser Leu Pro Ala Gly Gly
 100 105 110
 Arg Pro Gly Gln Thr Gly Ser Gln Ala Gln Gly Ala Ala Ala Asn Val
 115 120 125
 Ala Thr Leu Val Pro Gly Pro His Arg Trp Arg Asn Gly Tyr Arg Arg
 130 135 140
 Leu Leu Ala Asp
 145

<210> 2463
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 2463
 cccagggggt aagccatgag cctgttgagc caagtggccc gggcgccgtt gagcgccaag
 60
 ttccgctcgc tgattattct gttatacgtc gcgctggcgc tgtgngcgcc gctgctggcg
 120
 ccctatggcg aaaccacggt ggtgggtgaa ggcttcgcgc cgtggagcgg ccagtttttg
 180
 ctgggcaccg ataacctggg gcgcgacatg ttcagccgcc tgatgtacgg cgcgcgaat
 240
 accttgggca ttgccttct gacgacgacg ctggcgtttc tgctcggtgg tttgagcggt
 300
 ttggtcgcgg cgatcaaggg cggttgggtc gac
 333

<210> 2464
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 2464
 Met Ser Leu Leu Ser Gln Val Ala Arg Ala Pro Leu Ser Ala Lys Phe
 1 5 10 15
 Gly Leu Leu Ile Ile Leu Leu Tyr Val Ala Leu Xaa Ala Pro
 20 25 30
 Leu Leu Ala Pro Tyr Gly Glu Thr Gln Val Val Gly Glu Gly Phe Ala
 35 40 45
 Pro Trp Ser Gly Gln Phe Leu Leu Gly Thr Asp Asn Leu Gly Arg Asp
 50 55 60
 Met Phe Ser Arg Leu Met Tyr Gly Ala Arg Asn Thr Leu Gly Ile Ala
 65 70 75 80
 Phe Leu Thr Thr Thr Leu Ala Phe Leu Leu Gly Gly Leu Ser Gly Leu
 85 90 95
 Val Ala Ala Ile Lys Gly Gly Trp Val Asp
 100 105

<210> 2465
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 2465
 nntcatgagg acatttcct catatttggt ggtggtaaata cctcctggg acacggggga
 60
 atgaccagag gctggcgccc cacctggcag gaacagatgc cagctctgct gcagccatcg
 120
 ccccttgagc ggggtggctct gtgcctcttt ctgcactgct ggtgggtggt gctgttggt
 180
 ggggtgagga taccggctgc cagagatggc tcagggtcca gctgctgggc tatctcaggc
 240

actggctgct gggctatctc ggggtgccgc tgctgggcta tctcaggcgc tggctgctgc
 300
 tgggctgtct cgggtgctgg ctgttgggac gtctcctgtc ctggcactgg gctctcgggt
 360
 gctgggtgcc agctgctgcc taccttgac tgggctctgg gcactcactg cactcgggct
 420
 tttccatctc cgac
 434

<210> 2466
 <211> 82
 <212> PRT
 <213> Homo sapiens

<400> 2466
 Trp Ile Pro Ala Ala Arg Asp Gly Ser Gly Ala Ser Cys Trp Ala Ile
 1 5 10 15
 Ser Gly Thr Gly Cys Trp Ala Ile Ser Gly Ala Gly Cys Trp Ala Ile
 20 25 30
 Ser Gly Ala Gly Cys Cys Trp Ala Val Ser Gly Ala Gly Cys Trp Asp
 35 40 45
 Val Ser Cys Pro Gly Thr Gly Leu Ser Gly Ala Gly Cys Gln Leu Leu
 50 55 60
 Pro Thr Leu His Trp Ala Leu Gly Thr His Cys Thr Arg Ala Phe Pro
 65 70 75 80
 Ser Pro

<210> 2467
 <211> 306
 <212> DNA
 <213> Homo sapiens

<400> 2467
 atggactcca ccggcaccgg agcaggggggt aaggggaaga agggagcggc cgggcgcaag
 60
 gtcggcgggc caaggaagaa gtcgggtgtcg aggtccgtga aggcgggtct ccagttcccc
 120
 gtcggccgca tcgggcgcta cttgaagaag ggccgctacg cgcagcgtgt cggcaccggc
 180
 gcccccgtct acctcgccgc tgctcctgaa tacctcgccg ctgaggttct ggagctcgcc
 240
 ggtaagtgtc ccagggaaca caagaagact cgcattattc cgcgccacgt gcttctggcg
 300
 atccgg
 306

<210> 2468
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 2468
 Met Asp Ser Thr Gly Thr Gly Ala Gly Gly Lys Gly Lys Lys Gly Ala

```

      1             5             10             15
Ala Gly Arg Lys Val Gly Gly Pro Arg Lys Lys Ser Val Ser Arg Ser
      20             25             30
Val Lys Ala Gly Leu Gln Phe Pro Val Gly Arg Ile Gly Arg Tyr Leu
      35             40             45
Lys Lys Gly Arg Tyr Ala Gln Arg Val Gly Thr Gly Ala Pro Val Tyr
      50             55             60
Leu Ala Ala Val Leu Glu Tyr Leu Ala Ala Glu Val Leu Glu Leu Ala
      65             70             75             80
Gly Asn Ala Ala Arg Asp Asn Lys Lys Thr Arg Ile Ile Pro Arg His
      85             90             95
Val Leu Leu Ala Ile Arg
      100

```

<210> 2469

<211> 489

<212> DNA

<213> Homo sapiens

<400> 2469

```

gccggcggtgg cacatggcctt ccctgaagcc agcattgcc tggccaagga agctttgcag
60
aacagatgag atttcagctg ggacttgcag ccaagtggga tttggccttt tggggagaag
120
ggaaaggcca ttcaaaggcc agggacagag tatggtcaaa ggcattggaga tgaggagaag
180
gggaccagag cagaggggtca ggttggaagg cgagttgggg tcaatctgca aaggggctga
240
cgtgccaggt aaaaaacagg agcacagttt agttttgtcg gatcatttca ggtggaaggg
300
cagtggaagt gttggagaaa acactttttg gtgtcggttac attgaatctg ctcattcata
360
agaataaaac ttatttcat agagtatttg tatggctcaa aataggatg aagaattaag
420
aaaaagaatt ttagatttaa aatgaaaagg cacctacaaa agtagagtgg tagagttacc
480
aacgtggag
489

```

<210> 2470

<211> 115

<212> PRT

<213> Homo sapiens

<400> 2470

```

Met Ala Ser Leu Lys Pro Ala Leu Pro Trp Pro Arg Lys Leu Cys Arg
1             5             10             15
Thr Asp Glu Ile Ser Ala Gly Thr Cys Ser Gln Val Gly Phe Gly Leu
      20             25             30
Leu Gly Arg Arg Glu Arg Ala Phe Lys Gly Gln Gly Gln Ser Met Val
      35             40             45
Lys Gly Met Glu Met Arg Lys Arg Gly Pro Glu Gln Arg Val Arg Leu
      50             55             60
Glu Ser Glu Leu Gly Ser Ile Cys Lys Gly Ala Asp Val Pro Gly Lys

```

```

65              70              75              80
Lys Gln Glu His Ser Leu Val Leu Ser Asp His Phe Arg Trp Lys Gly
              85              90              95
Ser Gly Asn Val Gly Glu Asn Thr Phe Trp Cys Arg Tyr Ile Glu Ser
              100              105              110
Ala His Leu
              115

```

```

<210> 2471
<211> 779
<212> DNA
<213> Homo sapiens

```

```

<400> 2471
tggccatcct ccgtgacatg tacacttcca atatgccggt gtttgagccg ttcatagatc
60
ctcacatggt ggccttgac ttctttcaca gtgaggacct ctgcttcatg aggcataa
120
gaagaggagc taaggactat ttgtcatgg gggcgccaat ccactgcac ttctactata
180
attctctcat ttctgaggc aatatcagct ccaagatgtg tccaggagtt cttaggataa
240
gcactgtaaa gatgaacttt ccataaaacc ccaattgttc ctgggtcaat atgaattcca
300
ttcatacggg cacaaaagac tccctctgag gctctaagga gaatcagaag cttttgttcc
360
ttttctaagg gattttctaa agtaccacct ttcagctccc cgccgtcaat gaccatgcac
420
gccacactca gaacattgct tctgtccaca gggaagtcta aggtcccat cacatacagc
480
cctttgaaga attggaaaat ctgtatccac aaggacagtt ctgttgaggta aaatgagaac
540
gtcatcccca gggcctggaa tggatttgtt gtatcctccc cagccttctt caacaccttg
600
ccatgtttca gggagggacc attttaaagc tgattcaggg gcagaggtag aagctgaaat
660
agttgggggc ataccttcct tcaccggag aatgacttga acttggcctt cacctaaaac
720
cagataggtg agttgctca gctggctatt gaagaaccag tcacagcctt ggttctggc
779

```

```

<210> 2472
<211> 181
<212> PRT
<213> Homo sapiens

```

```

<400> 2472
Met Thr Phe Ser Phe Tyr Pro Thr Glu Leu Ser Leu Trp Ile Gln Ile
1              5              10              15
Phe Gln Phe Phe Lys Gly Leu Tyr Val Met Gly Thr Leu Asp Phe Pro
              20              25              30
Val Asp Arg Ser Asn Val Leu Ser Val Ala Cys Met Val Ile Ala Gly
              35              40              45
Gly Glu Leu Lys Val Gly Thr Leu Glu Asn Pro Leu Glu Lys Glu Gln

```

50		55		60											
Lys	Leu	Leu	Ile	Leu	Leu	Arg	Ala	Ser	Glu	Gly	Val	Phe	Cys	Asp	Arg
65				70					75						80
Met	Asn	Gly	Ile	His	Ile	Asp	Pro	Gly	Thr	Ile	Gly	Val	Tyr	Gly	Lys
			85						90					95	
Val	His	Leu	Tyr	Ser	Ala	Tyr	Pro	Lys	Asn	Ser	Trp	Thr	His	Leu	Gly
		100						105					110		
Ala	Asp	Ile	Ala	Ser	Gly	Asn	Glu	Arg	Ile	Ile	Val	Glu	Asp	Ala	Val
		115					120					125			
Asp	Trp	Arg	Pro	His	Asp	Lys	Ile	Val	Leu	Ser	Ser	Ser	Ser	Tyr	Glu
	130					135					140				
Pro	His	Glu	Ala	Glu	Val	Leu	Thr	Val	Lys	Glu	Val	Lys	Gly	His	His
145				150						155				160	
Val	Arg	Ile	Tyr	Glu	Arg	Leu	Lys	His	Arg	His	Ile	Gly	Ser	Val	His
			165						170					175	
Val	Thr	Glu	Asp	Gly											
			180												

<210> 2473

<211> 698

<212> DNA

<213> Homo sapiens

<400> 2473

nngtgcacca agaaatggca gcctgacaag ctggtggttg tatggactcg gcggaaccga
 60
 cgcactctgct ccaaggccca cagctggcag ccgnnggcac ccagaaccca taccggggga
 120
 ccgtggtgtg gatggtaacnc tgagaatgtg gacatctctg tgaccctcta cagggacccc
 180
 cacgtggacc agtatgaggc caaagagtgg acattttatta ttgaaaatga gtctaaaggg
 240
 cagcgggaagg tgctggccac ggccgaggtg gacctggccc gccatgccag ggcccgtgcc
 300
 ntgtccaagt ccnactgag gctgcggctg aagccaaagt cagtgaagac ggtgcaggct
 360
 gagctgagcc tcaactcttc cgggggtgctg ctgcgggagg gccgtgccac ggacgatgac
 420
 atgcagagtc tcgaagcct catgagtgtg aagcctagt atgtggggcaa cttggatgac
 480
 tttgtgaga gtgatgaaga tgaggctcat ggcccaggag ccccggaggc ccgggctcga
 540
 gtccccagc caggtgggct cacagcctgc tgtggatcga gactgccaa acctggggag
 600
 ggagggttac ccgggccacc agccactgct tgtgccgcc ctgtgatggg aactcattac
 660
 tgcccaggga gtcccaacca acccagcagc ctcaattg
 698

<210> 2474

<211> 232

<212> PRT

<213> Homo sapiens

<400> 2474

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Xaa Cys Thr Lys Lys Trp Gln Pro Asp Lys Leu Val Val Val Trp Thr
 1           5           10           15
Arg Arg Asn Arg Arg Ile Cys Ser Lys Ala His Ser Trp Gln Pro Xaa
 20           25           30
Ala Ser Arg Thr His Thr Gly Ala Pro Trp Cys Gly Trp Tyr Xaa Glu
 35           40           45
Asn Val Asp Ile Ser Val Thr Leu Tyr Arg Asp Pro His Val Asp Gln
 50           55           60
Tyr Glu Ala Lys Glu Trp Thr Phe Ile Ile Glu Asn Glu Ser Lys Gly
 65           70           75           80
Gln Arg Lys Val Leu Ala Thr Ala Glu Val Asp Leu Ala Arg His Ala
 85           90           95
Arg Ala Arg Ala Xaa Ser Lys Ser Xaa Leu Arg Leu Arg Leu Lys Pro
100           105           110
Lys Ser Val Lys Thr Val Gln Ala Glu Leu Ser Leu Thr Leu Ser Gly
115           120           125
Val Leu Leu Arg Glu Gly Arg Ala Thr Asp Asp Asp Met Gln Ser Leu
130           135           140
Ala Ser Leu Met Ser Val Lys Pro Ser Asp Val Gly Asn Leu Asp Asp
145           150           155           160
Phe Ala Glu Ser Asp Glu Asp Glu Ala His Gly Pro Gly Ala Pro Glu
165           170           175
Ala Arg Ala Arg Val Pro Gln Pro Gly Gly Leu Thr Ala Cys Cys Gly
180           185           190
Ser Arg Leu Pro Arg Pro Gly Glu Gly Gly Leu Pro Gly Pro Pro Ala
195           200           205
Thr Cys Cys Ala Arg Pro Val Met Gly Thr His Tyr Cys Pro Gly Ser
210           215           220
Pro Asn Gln Pro Ser Ser Leu Asn
225           230

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<210> 2475

<211> 1251

<212> DNA

<213> Homo sapiens

<400> 2475

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ngcgtgcccc agatgcaggt gagcaagagg atgctggcgg ggggcgtgag gagcatgccc
60
agccccctcc tggcctgctg gcagcccatc ctccctgttg tgctgggctc agtgcgtgca
120
ggctcgccca cgggtgcccc gcccgctgc gagggtccg cccaggaccg cgctgtgctg
180
tgccaccgca agcgttttgt ggcagtcgcc gagggcatcc ccaccgagac gcgcctgctg
240
gacctaggca agaaccgcat caaaacgctc aaccaggacg agttcgccag cttcccgcac
300
ctggaggagc tggagctcaa cgagaacatc gtgagcgccc tggagccccg cgccttcaac
360
aacctcttca acctccggac gctgggtctc cgcagcaacc gcctgaagct catcccgcta
420
ggcgtcttca ctggcctcag caacctgacc aagctggaca tcagcgagaa caagatcggt
480

```

atcctactgg actacatggt tcaggacctg tacaacctca agtcaactgga gggtggcgac
 540
 aatgacctcg tctacatctc tcaccgcgcc ttcagcggcc tcaacagcct ggagcagctg
 600
 acgctggaga aatgcaacct gacctccatc cccaccgagg cgctgtccca cctgcacggc
 660
 ctcatcgctc tgaggctccg gcacctcaac atcaatgcc a tccgggacta ctccttcaag
 720
 aggctgtacc gactcaaggt ctggagatc tcccaactggc cctacttgga caccatgaca
 780
 cccaactgcc tctacggcct caacctgacg tccctgtcca tcacacactg caatctgacc
 840
 gctgtgcctt acctggcctg ccgccacct a gtctatctcc gcttctctaa cctctctac
 900
 aacccccatc gcaccattga gggtccatg ttgcatgagc tgctccggct gcaggagatc
 960
 cagctgggtg gcgggcagct gcccggtgg agccctgctt tccggcgctt caactacctg
 1020
 cgctgtctca atgtctctgg caaccagctg accacactgg aggaatcagt cttccactcg
 1080
 gtgggcaacc tggagacact catcctggac tccaaccgcg tggcctgcga ctgtcgctc
 1140
 ctgtgggtgt tccggcgccg tggcctacaa acttcaaccg gcagcagccc acgtgcgcca
 1200
 cgccccagtt tgtccagggg caaggagtgc aaggacttcc ctgatgtgct a
 1251

<210> 2476

<211> 417

<212> PRT

<213> Homo sapiens

<400> 2476

Xaa	Ala	Pro	Glu	Met	Gln	Val	Ser	Lys	Arg	Met	Leu	Ala	Gly	Gly	Val
1				5					10					15	
Arg	Ser	Met	Pro	Ser	Pro	Leu	Leu	Ala	Cys	Trp	Gln	Pro	Ile	Leu	Leu
			20					25					30		
Leu	Val	Leu	Gly	Ser	Val	Leu	Ser	Gly	Ser	Ala	Thr	Gly	Cys	Pro	Pro
		35					40					45			
Arg	Cys	Glu	Cys	Ser	Ala	Gln	Asp	Arg	Ala	Val	Leu	Cys	His	Arg	Lys
	50					55				60					
Arg	Phe	Val	Ala	Val	Pro	Glu	Gly	Ile	Pro	Thr	Glu	Thr	Arg	Leu	Leu
	65				70				75					80	
Asp	Leu	Gly	Lys	Asn	Arg	Ile	Lys	Thr	Leu	Asn	Gln	Asp	Glu	Phe	Ala
			85					90						95	
Ser	Phe	Pro	His	Leu	Glu	Glu	Leu	Glu	Leu	Asn	Glu	Asn	Ile	Val	Ser
		100					105						110		
Ala	Val	Glu	Pro	Gly	Ala	Phe	Asn	Asn	Leu	Phe	Asn	Leu	Arg	Thr	Leu
		115					120					125			
Gly	Leu	Arg	Ser	Asn	Arg	Leu	Lys	Leu	Ile	Pro	Leu	Gly	Val	Phe	Thr
	130					135					140				
Gly	Leu	Ser	Asn	Leu	Thr	Lys	Leu	Asp	Ile	Ser	Glu	Asn	Lys	Ile	Val
	145				150				155					160	
Ile	Leu	Leu	Asp	Tyr	Met	Phe	Gln	Asp	Leu	Tyr	Asn	Leu	Lys	Ser	Leu

```

      165              170              175
Glu Val Gly Asp Asn Asp Leu Val Tyr Ile Ser His Arg Ala Phe Ser
      180              185              190
Gly Leu Asn Ser Leu Glu Gln Leu Thr Leu Glu Lys Cys Asn Leu Thr
      195              200              205
Ser Ile Pro Thr Glu Ala Leu Ser His Leu His Gly Leu Ile Val Leu
      210              215              220
Arg Leu Arg His Leu Asn Ile Asn Ala Ile Arg Asp Tyr Ser Phe Lys
      225              230              235              240
Arg Leu Tyr Arg Leu Lys Val Leu Glu Ile Ser His Trp Pro Tyr Leu
      245              250              255
Asp Thr Met Thr Pro Asn Cys Leu Tyr Gly Leu Asn Leu Thr Ser Leu
      260              265              270
Ser Ile Thr His Cys Asn Leu Thr Ala Val Pro Tyr Leu Ala Val Arg
      275              280              285
His Leu Val Tyr Leu Arg Phe Leu Asn Leu Ser Tyr Asn Pro Ile Ser
      290              295              300
Thr Ile Glu Gly Ser Met Leu His Glu Leu Leu Arg Leu Gln Glu Ile
      305              310              315              320
Gln Leu Val Gly Gly Gln Leu Ala Gly Trp Ser Pro Ala Phe Arg Gly
      325              330              335
Leu Asn Tyr Leu Arg Val Leu Asn Val Ser Gly Asn Gln Leu Thr Thr
      340              345              350
Leu Glu Glu Ser Val Phe His Ser Val Gly Asn Leu Glu Thr Leu Ile
      355              360              365
Leu Asp Ser Asn Pro Leu Ala Cys Asp Cys Arg Leu Leu Trp Val Phe
      370              375              380
Arg Arg Arg Gly Leu Gln Thr Ser Thr Gly Ser Ser Pro Arg Ala Pro
      385              390              395              400
Arg Pro Ser Leu Ser Arg Gly Lys Glu Phe Lys Asp Phe Pro Asp Val
      405              410              415
Leu

```

<210> 2477

<211> 548

<212> DNA

<213> Homo sapiens

<400> 2477

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nagactgcga tcagacgcgc gtgccagct gaaccagtg cgtgagaagg ctgccttcag
60
gtggccgggg gctccctcca gctgtctctg gacggaggga cgggaagtgg ccagaagggg
120
aagtgtgagg agttcccgtc cagcctgtca tcagtctccc caggctctga agcgcgggcc
180
ctgctctctg ccgtgacat ggaccctctg gagacccta tcaaggatgg catcctctac
240
cagcagcatg tcaagtttgg caagaagtgc tggcggaagg tgtgggtctt gctgtatgca
300
ggaggcccat caggcgtggc acggctggag aactgggagg tccgggatgg tggcctggga
360
gcagcggggt acaggtcggc ggggcctggc cggcgagggt agcgacgggt catccgctg
420

```

gctgactgtg tgtccgtgct gccggctgac ggcgagagct gcccccgga caccggtgcc
 480
 ttcttgetca ccaccaccga gcgaagccat ctactggctg ctcagcaccg ccaggcctgg
 540
 atggggccc
 548

<210> 2478<211> 113

<212> PRT

<213> Homo sapiens

<400> 2478

Leu	Glu	Thr	Pro	Ile	Lys	Asp	Gly	Ile	Leu	Tyr	Gln	Gln	His	Val	Lys
1			5					10					15		
Phe	Gly	Lys	Lys	Cys	Trp	Arg	Lys	Val	Trp	Ala	Leu	Leu	Tyr	Ala	Gly
		20						25				30			
Gly	Pro	Ser	Gly	Val	Ala	Arg	Leu	Glu	Asn	Trp	Glu	Val	Arg	Asp	Gly
		35					40				45				
Gly	Leu	Gly	Ala	Ala	Gly	Asp	Arg	Ser	Ala	Gly	Pro	Gly	Arg	Arg	Gly
	50					55				60					
Glu	Arg	Arg	Val	Ile	Arg	Leu	Ala	Asp	Cys	Val	Ser	Val	Leu	Pro	Ala
65			70					75					80		
Asp	Gly	Glu	Ser	Cys	Pro	Arg	Asp	Thr	Gly	Ala	Phe	Leu	Leu	Thr	Thr
		85						90					95		
Thr	Glu	Arg	Ser	His	Leu	Leu	Ala	Ala	Gln	His	Arg	Gln	Ala	Trp	Met
		100					105						110		

Gly

<210> 2479

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2479

gaattcatgg aggtctatga ggaggatgaa gaatatgcgt atgaaaaata tgaaacccat
 60
 ttccgcacga gctggatgga ggagaccgca ggcaccttct cactgaactg gtatcgcagc
 120
 aggtactgga atgacaatga agcagcagaa aggcttgcgt tgatgtgggc taaaaccttc
 180
 aaatatgcgt cgataaacgt ctctggcag acogggatta gcaatagcga cgacaggggc
 240
 aatgaagatg aagacatggt ctacgccggt atctccattc cgctgggagg cggggcgatc
 300
 tctaaactct ggtatcgtga atat
 324

<210> 2480

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2480


```

Glu Phe Met Glu Val Tyr Glu Glu Asp Glu Glu Tyr Ala Tyr Glu Lys
 1           5           10           15
Tyr Glu Thr His Phe Gly Thr Ser Trp Met Glu Glu Thr Ala Gly Thr
      20           25           30
Phe Ser Leu Asn Trp Tyr Arg Ser Arg Tyr Trp Asn Asp Asn Glu Ala
      35           40           45
Ala Glu Arg Leu Ala Leu Met Trp Ala Lys Thr Phe Lys Tyr Ala Ser
      50           55           60
Ile Asn Val Ser Trp Gln Thr Gly Ile Ser Asn Ser Asp Asp Glu Gly
      65           70           75           80
Asn Glu Asp Glu Asp Met Phe Tyr Ala Gly Ile Ser Ile Pro Leu Gly
      85           90           95
Gly Gly Ala Tyr Ser Asn Ser Trp Tyr Arg Glu Tyr
      100           105

```

<210> 2481

<211> 484

<212> DNA

<213> Homo sapiens

<400> 2481

```

gcgttcacta acgcttcaac aaactcttac aagcgtcttg ttccctggttt cgaagcacct
60
ggtatgttgg cttactcagc togtaacctg tctgcttcta tccgtatccc atacgttgca
120
agccctaaag gcaagcgtat tgaagctcgt ttccctgatc caaccgctaa cccataccta
180
gcatttttcag ctatgttgat ggctggtatc gatggtatca aaaacaagat tcaccctggc
240
gatgcagcag acaaagattt gtacgacctt ccagctgaag aagcagccgc tatccctcaa
300
gttgcttagca gcttagaaga agcgcttaag tgcctagatc aagaccgtga gttcttgact
360
caagggtggcg ttttctctga cgacatgatc gatgcttaca tcgctcttaa agcagaagaa
420
gcacagcgtg ttgcaatgac aacaacacca cttgagttcg aactttacta cagcctataa
480
gctt
484

```

<210> 2482

<211> 159

<212> PRT

<213> Homo sapiens

<400> 2482

```

Ala Phe Thr Asn Ala Ser Thr Asn Ser Tyr Lys Arg Leu Val Pro Gly
 1           5           10           15
Phe Glu Ala Pro Val Met Leu Ala Tyr Ser Ala Arg Asn Arg Ser Ala
      20           25           30
Ser Ile Arg Ile Pro Tyr Val Ala Ser Pro Lys Gly Lys Arg Ile Glu
      35           40           45
Ala Arg Phe Pro Asp Pro Thr Ala Asn Pro Tyr Leu Ala Phe Ser Ala
      50           55           60

```

```

Met Leu Met Ala Gly Ile Asp Gly Ile Lys Asn Lys Ile His Pro Gly
65              70              75              80
Asp Ala Ala Asp Lys Asp Leu Tyr Asp Leu Pro Ala Glu Glu Ala Ala
85              90              95
Ala Ile Pro Gln Val Ala Ser Ser Leu Glu Glu Ala Leu Lys Cys Leu
100             105             110
Asp Gln Asp Arg Glu Phe Leu Thr Gln Gly Gly Val Phe Ser Asp Asp
115             120             125
Met Ile Asp Ala Tyr Ile Ala Leu Lys Ala Glu Glu Ala Gln Arg Val
130             135             140
Ala Met Thr Thr Thr Pro Leu Glu Phe Glu Leu Tyr Ser Leu
145             150             155

```

<210> 2483

<211> 477

<212> DNA

<213> Homo sapiens

<400> 2483

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acgcgtgttta gccaaatctt ggttcctccc gttctctcct taccgagcc tgaggccctt
60
ctggagaaca ggcagcctct gaggaaacct ctgatccccc atcagccacc ccatacgctg
120
cgtccccagc cgcttctctc tggccttggt cccctctccc tgtgaaggag agaacagttt
180
cggctggccc tgagatgctg gcagcgctgc agtcagggca gtggggccct cccaccttga
240
aatgggtcctt cgtggtgcag ttctgcttac ggggtagact ttgttgccct ccacagagga
300
cagtttagggt gggcaggaag gaagtctctg ccacaagtct gcattccagg ctgtttccag
360
aagtggggaat tctctcgtgc cctggagtct gggaatgcat ttttagtttc ccagcttcag
420
gtagaattga aattgagtga gccaaaccac cacatccatc tggagccagg aactagt
477

```

<210> 2484

<211> 130

<212> PRT

<213> Homo sapiens

<400> 2484

```

Met His Ser Gln Thr Pro Gly His Glu Arg Ile Pro Thr Ser Gly Asn
1              5              10              15
Ser Leu Glu Cys Arg Leu Val Ala Glu Thr Ser Phe Leu Pro Thr Leu
20             25             30
Thr Val Leu Cys Gly Arg Gln Gln Ser Leu Pro Arg Lys Gln Asn Cys
35             40             45
Thr Thr Lys Asp His Phe Lys Val Gly Gly Ala His Cys Pro Asp Cys
50             55             60
Arg Pro Ala Ser Ile Ser Gly Pro Ala Glu Thr Val Leu Ser Phe Thr
65             70             75             80
Gly Lys Gly Glu Gln Gly Gln Glu Glu Ala Ala His Asp Ala Gly Asp
85             90             95

```

Gly Val Ala Asp Arg Gly Ser Glu Val Ser Ser Glu Ala Ala Cys Ser
 100 105 110
 Pro Glu Gly Pro Gln Ala Arg Val Arg Arg Glu Arg Glu Glu Pro Arg
 115 120 125
 Phe Gly
 130

<210> 2485
 <211> 608
 <212> DNA
 <213> Homo sapiens

<400> 2485
 accggtgagg cgaagtgcgg tggcaattac gcagcttcgc tgcgttccca gatcgatgcc
 60
 aagacccgcg actgcaacga ggtgctcttt gtcgatgcag ttgaacatcg ctggatcgag
 120
 gagctggggt gtatgaactt catggccatc agcaaagacg gtcagctcgt ccccccgag
 180
 ctagctggca ccatcctcgc tggcgtgacc cgcaagtcca ttctggaagt tgccccgcac
 240
 ctcggtcttt aaccagtgga gcgcaagatc gatgttgacg agctccttga tggcggttcg
 300
 tctggcgagt tcccgggaagt ctctgcctgt ggtaccgcg cggttgctac accgatcgcc
 360
 tctttcctag atggagatag cgacgtgaag gtctctgagc ccaccggaaa gaccacgatg
 420
 gagatccgcg gcgctctgct ggatatccag ttcggacgcg ctgaggacac ccatgggtgg
 480
 ttgaagcgag tctgctgacg gcgtcgacga ccattggggc cgcccccaat gatgtgttca
 540
 cgatcgggct acgacggtgt cgatgacaat gtcttgccgc tggaaagggtt gcccgacggt
 600
 gaacgcgt
 608

<210> 2486
 <211> 165
 <212> PRT
 <213> Homo sapiens

<400> 2486
 Thr Gly Glu Ala Lys Cys Gly Gly Asn Tyr Ala Ala Ser Leu Arg Ser
 1 5 10 15
 Gln Ile Asp Ala Lys Thr Arg Asp Cys Asn Glu Val Leu Phe Val Asp
 20 25 30
 Ala Val Glu His Arg Trp Ile Glu Glu Leu Gly Gly Met Asn Phe Met
 35 40 45
 Ala Ile Ser Lys Asp Gly Gln Leu Val Thr Pro Glu Leu Ala Gly Thr
 50 55 60
 Ile Leu Arg Gly Val Thr Arg Lys Ser Ile Leu Glu Val Ala Pro Asp
 65 70 75 80
 Leu Gly Leu Glu Pro Val Glu Arg Lys Ile Asp Val Asp Glu Leu Leu
 85 90 95

```

Asp Gly Val Arg Ser Gly Glu Phe Pro Glu Val Phe Ala Cys Gly Thr
      100      105      110
Ala Ala Val Val Thr Pro Ile Gly Ser Phe Leu Asp Gly Asp Thr Asp
      115      120      125
Val Lys Val Ser Glu Pro Thr Gly Lys Thr Thr Met Glu Ile Arg Arg
      130      135      140
Arg Leu Leu Asp Ile Gln Phe Gly Arg Ala Glu Asp Thr His Gly Trp
145      150      155      160
Leu Lys Arg Val Cys
      165

```

```

<210> 2487
<211> 339
<212> DNA
<213> Homo sapiens

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```

<400> 2487
nnccctcag gagagcagcc catggaaggt ccccccaag gggccctga gagccctgac
60
agtctgcaaa gaaaccagaa agagctccag gccctcctga cccaggtgca agccctggag
120
aaggaggccg caagcagtgt ggacgtgcag gccctgcgga ggctctttga ggccgtgcc
180
cagctgggag gggctgctcc tcaggtcctc gctgcccacc aaaagcccga ggcctcagt
240
gagcagccct ttggggagct gacacgggtc agcacggaag ttgtcctaact gaaggaacag
300
accttggtaa ggctgctgga cattgaagag gctgtgcac
339

```

```

<210> 2488
<211> 113
<212> PRT
<213> Homo sapiens

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```

<400> 2488
Xaa Pro Ser Gly Glu Gln Pro Met Glu Gly Pro Pro Gln Gly Ala Pro
1      5      10      15
Glu Ser Pro Asp Ser Leu Gln Arg Asn Gln Lys Glu Leu Gln Gly Leu
20      25      30
Leu Thr Gln Val Gln Ala Leu Glu Lys Glu Ala Ala Ser Ser Val Asp
35      40      45
Val Gln Ala Leu Arg Arg Leu Phe Glu Ala Val Pro Gln Leu Gly Gly
50      55      60
Ala Ala Pro Gln Ala Pro Ala Ala His Gln Lys Pro Glu Ala Ser Val
65      70      75      80
Glu Gln Ala Phe Gly Glu Leu Thr Arg Val Ser Thr Glu Val Ala Gln
85      90      95
Leu Lys Glu Gln Thr Leu Val Arg Leu Leu Asp Ile Glu Glu Ala Val
100      105      110
His

```

```

<210> 2489

```

<211> 594

<212> DNA

<213> Homo sapiens

<400> 2489

nacggttct tcggactggc gacgatgctg atttctatcc cgacgggggt gaagctatct
 60
 aactggctgg tcaccatcta tcacggccgg gtgcgtatca ccagccagggt tctttggacc
 120
 ctgggcttca tggtagacct cgcatcgga ggcatgaccg gcgtactgct ggccatcccc
 180
 ggtgctgact tcgtactgca caacagcctg ttcggaattg ctcacttcca caacgtgatc
 240
 atcggcgccg cagtattcgg ctacatcgca ggtttcagct tctacttccc gaaagcgctt
 300
 ggcttcaaac tgcacgaaag ctggggcaag gctgcattct ggttctggat ctcgggcttc
 360
 ttcgtcgcgt tcattgccgt ctatgcactg ggtttcattg gcattgacct ttgtttgaac
 420
 gcccccccca cccctgagtg ggtcccgta cgtacggtt ccattggtcg tgcaactgat
 480
 atcgtctgct gtatgcctg ccagttgatt cagctgtatg tcacggtgcg tgatcgcaag
 540
 cagaacatgt gcgaatccgg cgacccatgg aatgcacaca ccttggaaat gtcg
 594

<210> 2490

<211> 198

<212> PRT

<213> Homo sapiens

<400> 2490

Xaa	Ala	Phe	Phe	Gly	Leu	Ala	Thr	Met	Leu	Ile	Ser	Ile	Pro	Thr	Gly
1			5						10					15	
Val	Lys	Leu	Phe	Asn	Trp	Leu	Val	Thr	Ile	Tyr	His	Gly	Arg	Val	Arg
		20						25					30		
Ile	Thr	Ser	Gln	Val	Leu	Trp	Thr	Leu	Gly	Phe	Met	Val	Thr	Phe	Ala
		35					40					45			
Ile	Gly	Gly	Met	Thr	Gly	Val	Leu	Leu	Ala	Ile	Pro	Gly	Ala	Asp	Phe
		50				55				60					
Val	Leu	His	Asn	Ser	Leu	Phe	Gly	Ile	Ala	His	Phe	His	Asn	Val	Ile
			70							75				80	
Ile	Gly	Gly	Ala	Val	Phe	Gly	Tyr	Ile	Ala	Gly	Phe	Ser	Phe	Tyr	Phe
			85						90					95	
Pro	Lys	Ala	Phe	Gly	Phe	Lys	Leu	His	Glu	Ser	Trp	Gly	Lys	Ala	Ala
		100						105					110		
Phe	Trp	Phe	Trp	Ile	Ser	Gly	Phe	Phe	Val	Ala	Phe	Met	Pro	Leu	Tyr
		115					120					125			
Ala	Leu	Gly	Phe	Met	Gly	Met	Thr	Arg	Cys	Leu	Asn	Ala	Pro	Pro	Thr
		130				135					140				
Pro	Glu	Trp	Val	Pro	Tyr	Leu	Tyr	Val	Ala	Met	Val	Gly	Ala	Leu	Met
			145			150				155				160	
Ile	Ala	Val	Gly	Ile	Ala	Cys	Gln	Leu	Ile	Gln	Leu	Tyr	Val	Ser	Val
			165					170						175	

Arg Asp Arg Lys Gln Asn Met Cys Glu Ser Gly Asp Pro Trp Asn Ala
 180 185 190
 His Thr Leu Glu Trp Ser
 195

<210> 2491
 <211> 592
 <212> DNA
 <213> Homo sapiens

<400> 2491
 acgcgtcacg caactgtcaa acttgccaat ccgcttgacg atactcgccc ctacctacgc
 60
 actacgttgt tgcctggtct attccatgca gtaacgacga atatgtcgcg atctcaggat
 120
 gatcttgcag tgttcgaaag cggaactgta ttccgcgccg tcaatccggc tgcggcaccg
 180
 cgtcccggtg tcgacgagcg cccctccgat gaagtccttg ccgagatcga cgccgccttg
 240
 ccagcccagc cgcgcgatgt cgcggccgtg atctgtggca gctgggtgcc cgatcgctgg
 300
 gatggagagt cgggtcaaggc tgactggcga cacgctgtgc tggctgcccc gaaggctgct
 360
 gatgctcttg gcgtgaggct ggtgcgcaag gctgaccgtc aggtcccatg gcattccggt
 420
 cgttgtgcgg ctctcatcgt cgatgggaag gtcattggcc atgctggtga gttgcacccc
 480
 acagttagtg cgaaggctgg tctgcctcag cgcacctgtg cggctcaggt caatctagat
 540
 gctttggtag cctgcgctcc gagcgggtgt gaggtcatgg ttatttcaag gt
 592

<210> 2492
 <211> 197
 <212> PRT
 <213> Homo sapiens

<400> 2492
 Thr Arg His Ala Thr Val Lys Leu Ala Asn Pro Leu Asp Asp Thr Arg
 1 5 10 15
 Pro Tyr Leu Arg Thr Thr Leu Leu Pro Gly Leu Phe His Ala Val Thr
 20 25 30
 Thr Asn Met Ser Arg Ser Gln Asp Asp Leu Ala Val Phe Glu Ser Gly
 35 40 45
 Thr Val Phe Arg Ala Val Thr Pro Ala Ala Ala Pro Arg Pro Gly Val
 50 55 60
 Asp Glu Arg Pro Ser Asp Glu Val Leu Ala Glu Ile Asp Ala Ala Leu
 65 70 75 80
 Pro Ala Gln Pro Arg Met Leu Ala Ala Val Ile Cys Gly Ser Trp Leu
 85 90 95
 Pro Asp Arg Trp Asp Gly Glu Ser Val Lys Ala Asp Trp Arg His Ala
 100 105 110
 Val Leu Val Ala Gln Lys Ala Ala Asp Ala Leu Gly Val Arg Leu Val
 115 120 125

```

Arg Lys Ala Asp Arg Gln Ala Pro Trp His Pro Gly Arg Cys Ala Ala
  130                135                140
Leu Ile Val Asp Gly Lys Val Ile Gly His Ala Gly Glu Leu His Pro
  145                150                155                160
Thr Val Val Ser Lys Ala Gly Leu Pro Gln Arg Thr Cys Ala Val Glu
                165                170                175
Phe Asn Leu Asp Ala Leu Val Ala Cys Ala Pro Ser Gly Gly Glu Val
                180                185                190
Met Val Ile Ser Arg
                195

```

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<210> 2493
<211> 418
<212> DNA
<213> Homo sapiens

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<400> 2493
acgcgtcagg ttgccgtga tcgtgccacc gtcacctcca tgggtgccttc aggagcagac
60
ccccacacct atgagccgtc gctgcgtgac gttcggaccg tcgtgtattc gagagtcgcg
120
ctatcgaact acctcatgct cgaacctcat tcggtcatca agaccatoga ctcttcctta
180
cctacgggat ctatcaatgt ctccctggct gaggaagccc aaaagtacgg cgcacaagtg
240
atccccgtgg ttgaaatgc caacctagac accgtgtggc tggggttgcg cgctattggc
300
aagggcgcga ggcggggagc cgaccgctct tcctcggtct acctccagct gacgtcgggt
360
gaggggcctg gggacttcac tgcctatatc actgggacct ttgggtcgacc tcagatct
418

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<210> 2494
<211> 139
<212> PRT
<213> Homo sapiens

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<400> 2494
Thr Arg Gln Val Ala Gly Asp Arg Ala Thr Val Thr Ser Met Val Pro
  1           5           10           15
Ser Gly Ala Asp Pro His Thr Tyr Glu Pro Ser Leu Arg Asp Val Arg
                20           25           30
Thr Val Val Tyr Ser Arg Val Ala Leu Ser Asn Tyr Leu Met Leu Glu
                35           40           45
Pro His Ser Val Ile Lys Thr Ile Asp Ser Ser Leu Pro Thr Gly Ser
                50           55           60
Ile Asn Val Ser Leu Ala Glu Glu Ala Gln Lys Tyr Gly Ala Gln Val
                65           70           75           80
Ile Pro Leu Val Glu Asn Ala Asn Leu Asp Thr Val Trp Leu Gly Leu
                85           90           95
Arg Val Ile Gly Lys Gly Ala Arg Arg Gly Ala Asp Arg Ser Ser Ser
                100          105          110
Val Tyr Leu Gln Leu Thr Ser Val Glu Gly Pro Gly Asp Phe Thr Ala
                115          120          125

```

Tyr Ile Thr Gly Thr Phe Gly Arg Pro Gln Ile
 130 135

<210> 2495
 <211> 1478
 <212> DNA
 <213> Homo sapiens

<400> 2495
 nnggcctggc ccagttgcac cacgagcgct gcgacactc ggggcggcag tcggtctgtc
 60
 agtctctccc ccaggtcccg cggcccgcac ctgccgcccg cactctgcagc tccgcacctg
 120
 cggccagtgc ctactgccct ctcttgcgcg cgcacactgc agccccgcac ctgccgcttg
 180
 cactctgcagc cccgcgctct acccggttca agcatggctg accaggcgcc cttcgacacg
 240
 gacgtcaaca cctgacccg ctctgctcatg gagggaggga ggaaggcccg cggcacgggc
 300
 gaggttgacc agctgctcaa ctgcctctgc acagcagtc aagccatctc ttggcgcggtg
 360
 cgcaaggcgg gcatcgcgca cctctatggc attgctgggt ctaccaacct gacagggtat
 420
 caagttaaga agctggcagt cctctccaac gacctgggta tgaacatgtt aaagtcatcc
 480
 ttgtccacct gtgttctcgt gtcagaagaa gataaacacg ccatcatagt ggaaccggag
 540
 aaaaggggta aatatgtggt ctgttttgat ccccttgatg gatcttccaa catcgattgc
 600
 cttgtgtccg ttggaacat ttttggcacc tatagaaaga aatcaactga tgagccttct
 660
 gagaaggatg ctctgcaacc aggcgcgaac ctggtggcag ccggctacgc actgtatggc
 720
 agtgccacca tgctggctct tgccatggac tgtgggggtca actgcttcat gctggaccgg
 780
 gccatcgggg agttcatttt ggtggacaag gatgtgaaga taaaaaaga aggtaaaaac
 840
 tacagcctta acgagggtta cgccaaggac ttgacctctg ccgtcactga gtacatccag
 900
 aggaagaagt tccccccaga taattcagct ccttatgggg ccgggtatgt gggctccatg
 960
 gtggctgatg ttcacgcac tctggtctac ggagggatat ttctgtaccg cgtaacaaga
 1020
 aagagcccca atggaagct gagactgctg tacgaatgca accccatggc ctacgtcatg
 1080
 gagaaggctg ggggaatggc caccactggg aaggaggccg tggtagacgt cattccccca
 1140
 gacattcacc agaggcgccc ggtgatcttg ggggtccccg acgacgtgct cgagttcctg
 1200
 aagggtgatg agaagcactc tgcccagtga gcacctgccc tgctgcctac cggagaattg
 1260
 cctctacctg gaccttttgt ctcacacagc agtacctgta cctgctgtgc accttcat
 1320


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<210> 2496
<211> 338
<212> PRT
<213> Homo sapiens
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1793

325 330 335

Ala Gln

<210> 2497
 <211> 399
 <212> DNA
 <213> Homo sapiens

<400> 2497
 acgcgtgtct tggccggtga aacccttccc gcagcagggt cagtacgtcg caccgcgcgag
 60
 cttggctacc tgccacagga tccccgcgac ccagacatgg aaatgatcgc gagggcaagg
 120
 atcctgtcag cgcgtggcct ggaccacata ctggaacgga tgcgcaccct ggagtatcag
 180
 atggcgaaac gttccgagga cgaccgtgcc gttgcgatgg acaaatatcg gaaggctgaa
 240
 gaccgtctcg tcgcggcccg tggctatggc gcctctgcag aggcagcccg aatcgcgtcg
 300
 aacttggggc ttgacgaccg cgtcctttcc cagccgttga aaaacctctc ggggtggtcag
 360
 cgtcgtcgcg tcgagctggc gcgcatectc ttttccgga
 399

<210> 2498
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 2498
 Thr Arg Val Leu Ala Gly Glu Thr Leu Pro Ala Ala Gly Ser Val Arg
 1 5 10 15
 Arg Thr Gly Glu Leu Gly Tyr Leu Pro Gln Asp Pro Arg Asp Pro Asp
 20 25 30
 Met Glu Met Ile Ala Arg Ala Arg Ile Leu Ser Ala Arg Gly Leu Asp
 35 40 45
 His Ile Leu Glu Arg Met Arg Thr Leu Glu Tyr Gln Met Ala Asn Gly
 50 55 60
 Ser Glu Asp Asp Arg Ala Val Ala Met Asp Lys Tyr Ala Lys Ala Glu
 65 70 75 80
 Asp Arg Leu Val Ala Ala Gly Gly Tyr Gly Ala Ser Ala Glu Ala Ala
 85 90 95
 Arg Ile Ala Ser Asn Leu Gly Leu Asp Asp Arg Val Leu Ser Gln Pro
 100 105 110
 Leu Lys Asn Leu Ser Gly Gly Gln Arg Arg Arg Val Glu Leu Ala Arg
 115 120 125
 Ile Leu Phe Ser Gly
 130

<210> 2499
 <211> 348
 <212> DNA
 <213> Homo sapiens

<400> 2499
 nggccgggag aagaccggtt ctatatggcc taccacgaca ccgagtgggg cgtgccggaa
 60
 tatgacgacc gcgcattgta cgagaagctc attctcgacg gattccaggc cggcctgtcg
 120
 tggatcacca tctcgcgcaa gcgcgacaac ttctcgaaag ccttcgacga tttccagccc
 180
 gagaagatag cgcgttacaa tgagaagaag gttcacgcgc tgatgaacga tgcggcgatc
 240
 gtgcgcaacc gcgccaagat cgaaggcagc atcgccagcg cgaaggcgta tctcgacatc
 300
 atggaaaaag gcccgggctt ctccaggctg ctgtgggact tcgtcgac
 348

<210> 2500
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 2500
 Xaa Pro Gly Glu Asp Pro Phe Tyr Met Ala Tyr His Asp Thr Glu Trp
 1 5 10 15
 Gly Val Pro Glu Tyr Asp Asp Arg Ala Leu Tyr Glu Lys Leu Ile Leu
 20 25 30
 Asp Gly Phe Gln Ala Gly Leu Ser Trp Ile Thr Ile Leu Arg Lys Arg
 35 40 45
 Asp Asn Phe Arg Lys Ala Phe Asp Asp Phe Gln Pro Glu Lys Ile Ala
 50 55 60
 Arg Tyr Asn Glu Lys Lys Val His Ala Leu Met Asn Asp Ala Gly Ile
 65 70 75 80
 Val Arg Asn Arg Ala Lys Ile Glu Gly Thr Ile Ala Ser Ala Lys Ala
 85 90 95
 Tyr Leu Asp Ile Met Glu Lys Gly Pro Gly Phe Ser Arg Leu Leu Trp
 100 105 110
 Asp Phe Val Asp
 115

<210> 2501
 <211> 569
 <212> DNA
 <213> Homo sapiens

<400> 2501
 gaattcgatt catttgtggc aaatgcttac aatttgatga ttgtaaccca tcaaatcaca
 60
 taatgcccat taagccatc catacacttc tttaaatagg aaaatatatg taaagtacgt
 120
 acttagcaca gggcctgacc tatagtaatg gtcaagaatg atagcggggg tgagggtatgg
 180
 ctttcaagag tcaaacaatt ttactgggtgc atcatttcca ttattctttt ctcttttgc
 240
 taataaaacc actcttaaga ttctaccttg gttagttaga gacaacagtt ctctggaaa
 300

tagattctat agcttcaact cctgaagag atgtgtgcta atttacatca aaaaaatcct
 360
 taagggtata aaatatgcc aagaactgtca acatcacaga ttaccactgg tagcttctgg
 420
 tatattgtta agtttccact taatttttaa gggacactag agaattagta tgactcacct
 480
 acactaagtt tataactgt atttaacagt gtaattttca aatatgacag gaataaccca
 540
 gatgtgaaat gctgaatcat taatcacag
 569

<210> 2502

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2502

Met	Ile	Ala	Gly	Val	Arg	Tyr	Gly	Phe	Gln	Glu	Ser	Asn	Asn	Phe	Thr
1			5					10						15	
Gly	Ala	Ser	Phe	Pro	Phe	Ile	Leu	Ser	Leu	Leu	His	Asn	Lys	Thr	Thr
		20					25					30			
Leu	Lys	Ile	Leu	Pro	Trp	Leu	Val	Arg	Asp	Asn	Ser	Ser	Leu	Glu	Ser
		35				40					45				
Arg	Phe	Tyr	Ser	Phe	Asn	Ser	Leu	Lys	Arg	Cys	Val	Leu	Ile	Tyr	Ile
	50				55					60					
Lys	Lys	Ile	Leu	Lys	Gly	Ile	Lys	Tyr	Ala	Lys	Asn	Cys	Gln	His	His
65			70					75						80	
Arg	Leu	Pro	Leu	Val	Ala	Ser	Gly	Ile	Leu	Leu	Ser	Phe	His	Leu	Ile
			85					90						95	
Phe	Lys	Gly	His												
			100												

<210> 2503

<211> 419

<212> DNA

<213> Homo sapiens

<400> 2503

gccacgccag ccacttacc tttcctcgac tcgccaaata agtattcact gaacatgtac
 60
 aaggccttgc tacctcagca gtcctacagc ttggcccagc cgctgtattc tccagtctgc
 120
 accaatgggg agcgtttct ctacctgcc ccacctcact acgtcggtcc ccacatccca
 180
 tcgtccttgg catcaccat gaggtctctg acaccttcgg cctcccagc catccgcct
 240
 ctctgcatt gcgcagacaa aagcctcccg tggaagatgg gcgtcagccc tgggaatcct
 300
 gttgattccc acgcctatcc tcacatccag aacagtaagc agcccagggt tccctctgcc
 360
 aaggcgggtca ccagtggcct gccgggggac acagctctcc tgttgcccc ctcacgcgt
 419

<210> 2504

<211> 121
 <212> PRT
 <213> Homo sapiens

<400> 2504
 Met Tyr Lys Ala Leu Leu Pro Gln Gln Ser Tyr Ser Leu Ala Gln Pro
 1 5 10 15
 Leu Tyr Ser Pro Val Cys Thr Asn Gly Glu Arg Phe Leu Tyr Leu Pro
 20 25 30
 Pro Pro His Tyr Val Gly Pro His Ile Pro Ser Ser Leu Ala Ser Pro
 35 40 45
 Met Arg Leu Ser Thr Pro Ser Ala Ser Pro Ala Ile Pro Pro Leu Val
 50 55 60
 His Cys Ala Asp Lys Ser Leu Pro Trp Lys Met Gly Val Ser Pro Gly
 65 70 75 80
 Asn Pro Val Asp Ser His Ala Tyr Pro His Ile Gln Asn Ser Lys Gln
 85 90 95
 Pro Arg Val Pro Ser Ala Lys Ala Val Thr Ser Gly Leu Pro Gly Asp
 100 105 110
 Thr Ala Leu Leu Leu Pro Pro Ser Arg
 115 120

<210> 2505
 <211> 540
 <212> DNA
 <213> Homo sapiens

<400> 2505
 tccggagcca atccgactca ggccctcgtc tggagccagg tgctgttgag catgggggtg
 60
 ccgctcgtgt tgggtccggtt ggctcggttc accggcgatc ggcgctctgat gggccaatgg
 120
 acgaatgggc gtgtcatggc cgccatcgcg tggatcgtcg tggcagcagt ctcggtcttc
 180
 aacgtgggtt tcgtcgtcga gacgggtcatg ggtgcatgat ccttgagggc agttttctgg
 240
 cgacaatcgt gaaaatgagt gacaaactca agcgggtgac gacgccgaac ccgcgaccga
 300
 cctctgcgcc cgagctagcc aacgatttgg ccaactgcatt tcgcggttac cctgtcggag
 360
 tggcgatcct cagcagcatg ggagcggctg ggcccagagg cttgacggtc tcctccctgg
 420
 cgctcggtgc agtcgtcccg gctgttgtgt cgggtgctgt gggtaaatggt tcgacgacc
 480
 tggccaccct gacggaggag tcccgcgtca tcgtccacat gcttgatgca gatcgcgccg
 540

<210> 2506
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 2506
 Ser Gly Ala Asn Pro Thr Gln Ala Leu Val Trp Ser Gln Val Leu Leu

```

      1           5           10           15
Ser Met Gly Leu Pro Leu Val Leu Val Pro Leu Ala Arg Phe Thr Gly
      20           25           30
Asp Arg Arg Leu Met Gly Gln Trp Thr Asn Gly Arg Val Met Ala Ala
      35           40           45
Ile Ala Trp Ile Val Val Ala Ala Val Ser Ala Leu Asn Val Val Leu
      50           55           60
Val Val Glu Thr Val Met Gly Ala
      65           70

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<210> 2507

<211> 922

<212> DNA

<213> Homo sapiens

<400> 2507

```

nacgcgtgaa gggcagagga gagagaccag tgaaggggga ggaggcgccc aaaaggagac
60
agcttcctgc ccccaggaca taaatagccc ggctgctgca ggtacctgaa ggagttcagg
120
acggagcagt gccccctgtt ttcacagcac aagtgcgcgc agcaccggcc gttcacctgc
180
ttccactggc acttctctaa ccagcggcgc cgcaggcccc tccgcaggcg cgacggcacc
240
ttcaactaca gccccgacgt gtactgctcc aagtacaacg aagccaccgg cgtgtgcccc
300
gacgcgcgac agtgtcccta cctgcaccgg acgacggggg acacagaacg caagtaccac
360
ctgcgttact acaaaacagg aacctgcac cagagacag acgcacgtgg ccaactgcgtg
420
aagaatgggc tgcactgtgc cttcgcgcac gggccccatg acctccgctc ccctgtctac
480
gacatcaggg agcttcaggc catggaggcc ttgcagaatg gccagaccac ggtagagggg
540
agcatagagg gccagtcggc tggggctgcg agccatgcca tgatagaaaa gatectcagc
600
gaggagcctc ggtggcaaga gactgcttat gtgtgggga actataagac ggagccttgc
660
aagaagcccc cgcgctgtg ccgccaaggc tatgcctgtc cctactacca caacagcaag
720
gaccggcgcc ggagcccccg gaagcacaaa tacaggctgt ctccatgtcc aaacgtcaag
780
cacggggatg agtggggaga ccttgccaag tgtgagaacg gagacgcctg ccagtactgc
840
cacacccgca ccgagcagca gtccacccc gagatctaca agtccaccaa gtgcaacgga
900
aggggggggg gggtagggga gg
922

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<210> 2508

<211> 278

<212> PRT

<213> Homo sapiens

<400> 2508

```

Pro Gly Cys Cys Arg Tyr Leu Lys Glu Phe Arg Thr Glu Gln Cys Pro
 1          5          10          15
Leu Phe Ser Gln His Lys Cys Ala Gln His Arg Pro Phe Thr Cys Phe
 20          25          30
His Trp His Phe Leu Asn Gln Arg Arg Arg Pro Leu Arg Arg Arg
 35          40          45
Asp Gly Thr Phe Asn Tyr Ser Pro Asp Val Tyr Cys Ser Lys Tyr Asn
 50          55          60
Glu Ala Thr Gly Val Cys Pro Asp Gly Asp Glu Cys Pro Tyr Leu His
 65          70          75          80
Arg Thr Thr Gly Asp Thr Glu Arg Lys Tyr His Leu Arg Tyr Tyr Lys
 85          90          95
Thr Gly Thr Cys Ile His Glu Thr Asp Ala Arg Gly His Cys Val Lys
100          105          110
Asn Gly Leu His Cys Ala Phe Ala His Gly Pro His Asp Leu Arg Ser
115          120          125
Pro Val Tyr Asp Ile Arg Glu Leu Gln Ala Met Glu Ala Leu Gln Asn
130          135          140
Gly Gln Thr Thr Val Glu Gly Ser Ile Glu Gly Gln Ser Ala Gly Ala
145          150          155          160
Ala Ser His Ala Met Ile Glu Lys Ile Leu Ser Glu Glu Pro Arg Trp
165          170          175
Gln Glu Thr Ala Tyr Val Leu Gly Asn Tyr Lys Thr Glu Pro Cys Lys
180          185          190
Lys Pro Pro Arg Leu Cys Arg Gln Gly Tyr Ala Cys Pro Tyr Tyr His
195          200          205
Asn Ser Lys Asp Arg Arg Arg Ser Pro Arg Lys His Lys Tyr Arg Ser
210          215          220
Ser Pro Cys Pro Asn Val Lys His Gly Asp Glu Trp Gly Asp Pro Gly
225          230          235          240
Lys Cys Glu Asn Gly Asp Ala Cys Gln Tyr Cys His Thr Arg Thr Glu
245          250          255
Gln Gln Phe His Pro Glu Ile Tyr Lys Ser Thr Lys Cys Asn Gly Arg
260          265          270
Gly Gly Gly Val Arg Glu
275

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<210> 2509

<211> 348

<212> DNA

<213> Homo sapiens

<400> 2509

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gcggccttg acctgggccc ggcatggct ccacggcaag gtccaataact cgtgcgctt
60
gtggcgctgg acttcgtcga tgcccgcgag gttttgctgc ccgcgacat tggactggac
120
gttcatgaac ggggtggagcc cggcaaaacc gaaactcaac caatccttg gtagctgga
180
cggcaggttg ccgagggcaa acacgttgac cagttcgca ccgacaccac cgaccacggc
240
caccgctccc agcggaatct ctagactta gcgccagggt tggtaaggcg ttagcggtc
300

```

gtaacgacgg gtgacctcga actcggggct tcaaagtctt ctgctgtg
348

<210> 2510
<211> 108
<212> PRT
<213> Homo sapiens

<400> 2510
Met Ala Pro Arg Gln Gly Pro Ile Leu Arg Ala Leu Val Ala Leu Asp
1 5 10 15
Phe Val Asp Ala Arg Glu Val Leu Leu Pro Ala Thr Ile Gly Leu Asp
20 25 30
Val His Glu Arg Val Glu Pro Gly Lys Thr Glu Thr Gln Pro Ile Leu
35 40 45
Gly Asp Ala Gly Arg Gln Val Ala Glu Gly Lys His Val Asp His Val
50 55 60
Arg Thr Asp Thr Thr Asp His Gly His Arg Ser Gln Arg Asn Leu Val
65 70 75 80
Asp Leu Ala Pro Gly Leu Val Arg Arg Val Ala Val Val Thr Thr Gly
85 90 95
Asp Leu Glu Leu Gly Ala Ser Lys Ser Ser Ala Val
100 105

<210> 2511
<211> 663
<212> DNA
<213> Homo sapiens

<400> 2511
nnacgcgtgt gggaccatat caggggagcc cgaatggtct caggttaagg cgggggtggt
60
tccttgacta ggctgctgtc gttggtctcc gtcgtcaacg agcaagatct gcaagtgtc
120
cctgtcatcg cacacgtcgg ttatccgcag gccgcccagc agtattacca gttgctttta
180
gcattacgcc caggacgcgt tgctggcctg gcggagatcg tcgtcaacgg tcaacctttt
240
accgtcactg acgccactga ggatgaacta getetcaactg ctggtggtcg tatcctctc
300
gagggaactc ccatcgccat ggatggatcg tggcagctgc atcgccgctg agcgccccct
360
gagccagttc ggttcgctaa gcgcttcggt ggtgagcaat cgaacacctc gatcatggtg
420
ggcgagccca tcatcatcaa aatgttccgc cgctggagc cgggcgacaa ccttgacatc
480
accgtgcata gcgcctcaa cgaatgccgg atctcatcgg tggccacatt gtacggcttt
540
atgtccggac agatccccgc tgaggaacac atccccggtc atctagctat gatcattgag
600
aggttgccac agccccggga tggctgggaa etcatcactg ccaaggcagt cgaatctcgtc
660
gac
663

<210> 2512
 <211> 221
 <212> PRT
 <213> Homo sapiens

<400> 2512
 Xaa Arg Val Trp Asp His Ile Arg Gly Ala Arg Trp Phe Ser Gly Lys
 1 5 10 15
 Gly Arg Gly Gly Ser Leu Thr Arg Leu Leu Ser Leu Ala Pro Val Val
 20 25 30
 Asn Glu Gln Asp Leu Gln Val Leu Pro Val Ile Ala His Val Gly Tyr
 35 40 45
 Pro Gln Ala Ala Asp Glu Tyr Tyr Gln Leu Leu Leu Ala Leu Arg Pro
 50 55 60
 Gly Arg Val Ala Gly Leu Ala Glu Ile Val Val Asn Gly Gln Pro Phe
 65 70 75 80
 Thr Val Thr Asp Ala Thr Glu Asp Glu Leu Ala Leu Thr Ala Trp Ala
 85 90 95
 Arg Ile Leu Leu Glu Gly Thr Pro Ile Ala Met Asp Gly Ser Trp Gln
 100 105 110
 Leu His Arg Arg Arg Ala Ala Pro Glu Pro Val Arg Phe Ala Lys Arg
 115 120 125
 Phe Gly Gly Glu Gln Ser Asn Thr Ser Ile Met Val Gly Asp Ala Ile
 130 135 140
 Ile Ile Lys Met Phe Arg Arg Leu Glu Pro Gly Asp Asn Leu Asp Ile
 145 150 155 160
 Thr Val His Ser Ala Leu Asn Asp Ala Gly Ile Ser Ser Val Ala Thr
 165 170 175
 Leu Tyr Gly Phe Met Ser Gly Gln Ile Pro Ala Glu Glu His Ile Pro
 180 185 190
 Val Asp Leu Ala Met Ile Ile Glu Arg Leu Pro Gln Pro Arg Asp Gly
 195 200 205
 Trp Glu Leu Ile Thr Ala Lys Ala Val Asp Leu Val Asp
 210 215 220

<210> 2513
 <211> 368
 <212> DNA
 <213> Homo sapiens

<400> 2513
 ctggctggaa tgatcacctt tacctgcaac ctggctgaga atgtgtccag caaagttcgt
 60
 cagcttgacc tggccaagaa cgcctctat caggccattc agagagctga tgacatctgt
 120
 gacctgaagt tctgcatgga tggagttcag actgctttga ggagtgaaga ttatgagcag
 180
 gctgcagcac atattcatcg ctacttgtgc ctggacaagt cggctcattga gctcagccga
 240
 cagggcaag agggtcagca tccgaaactg gagcatgatt gatgccaaac tgaattgtgt
 300
 gcaggaagct gagcaacgtc tcaaagccat tgtggcagag aagtttgcca ttgccaccaa
 360

ggaagggtg
368

<210> 2514
<211> 93
<212> PRT
<213> Homo sapiens

<400> 2514
Leu Ala Gly Met Ile Thr Phe Thr Cys Asn Leu Ala Glu Asn Val Ser
1 5 10 15
Ser Lys Val Arg Gln Leu Asp Leu Ala Lys Asn Arg Leu Tyr Gln Ala
20 25 30
Ile Gln Arg Ala Asp Asp Ile Leu Asp Leu Lys Phe Cys Met Asp Gly
35 40 45
Val Gln Thr Ala Leu Arg Ser Glu Asp Tyr Glu Gln Ala Ala His
50 55 60
Ile His Arg Tyr Leu Cys Leu Asp Lys Ser Val Ile Glu Leu Ser Arg
65 70 75 80
Gln Gly Lys Glu Gly Gln His Pro Lys Leu Glu His Asp
85 90

<210> 2515
<211> 351
<212> DNA
<213> Homo sapiens

<400> 2515
agatcttaag ggccccagga atttggtttg ttttcctttt taactcccca ggtaattatg
60
gtctcatctcg gaccagaccc ttctacaccc tccaactccc caacaactgg gcaattggaa
120
tatcagtcca tcctataaag ccaaccaggc tctcccaggg gaggcaggaa atccctgctc
180
cttccatccc ccaccgggaa tgctgcaggg ggcttgaggg aggcgacaca gtggggagct
240
ctggggtgcag gtgggcagac aatggggcaa cacacccct cagccccgct ccagttatcag
300
cattccagac ccaccacact gggcccttgg tcaccgggag acctcacgcg t
351

<210> 2516
<211> 98
<212> PRT
<213> Homo sapiens

<400> 2516
Met Ala His Pro Gly Pro Asp Pro Ser Tyr Pro Ser Asn Ser Pro Thr
1 5 10 15
Thr Gly Gln Leu Glu Tyr Gln Ser Ile Pro Lys Ser Gln Pro Gly Ser
20 25 30
Pro Glu Gly Gly Arg Lys Ser Leu Leu Pro Pro Ser Pro Thr Gly Asn.
35 40 45
Ala Ala Gly Gly Leu Arg Glu Ala Thr Gln Trp Gly Ala Leu Gly Ala

```

      50              55              60
Gly Gly Gln Thr Met Gly Gln His Thr Pro Ser Ala Pro Leu Gln Tyr
65              70              75              80
Gln His Ser Arg Pro Thr His Leu Gly Pro Trp Ser Pro Gly Asp Leu
      85              90              95
Thr Arg

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<210> 2517
<211> 356
<212> DNA
<213> Homo sapiens

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<400> 2517
acgcgtggaa agacagtgc tctgagtgtg tacgcatggg agcagaaggg gaggacaaac
60
ggaggtggcc agtgagtcag gaggcggggg ggggggctag ggcttcccca ggggtcagga
120
cctgtcacca accaaacccc atgggcctat tcagcagccc caacttggct ggtctggccg
180
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<210> 2518
<211> 103
<212> PRT
<213> Homo sapiens

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<400> 2518
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1      5      10      15
Ala Gly Gly Gly Ala Arg Ala Ser Pro Gly Val Arg Thr Cys His Gln
20      25      30
Pro Asn Pro Met Gly Leu Phe Ser Ser Pro Asn Leu Ala Gly Leu Ala
35      40      45
Glu Ala Thr His Ser Leu Gly Thr Glu Leu Gln Gly Ala Gly Ser Leu
50      55      60
Ser Arg Lys Arg Pro Val Leu Ser Gly Gln Cys Leu Thr Pro Ala Pro
65      70      75      80
Pro Ser Gln Ala Ser Ser Ser His Leu Pro Gln Ser Phe Pro Ser Arg
85      90      95
Pro Ser Ser Thr Gly Gln Thr
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<210> 2519
<211> 830
<212> DNA
<213> Homo sapiens

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<400> 2519

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<210> 2520

<211> 107

<212> PRT

<213> Homo sapiens

<400> 2520

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Met Ser Pro Ala Arg Cys Leu Gly Leu Gly Pro Glu Asn Phe Gly
 1             5             10             15
Glu Glu Val Gly Leu Leu Cys Asn Cys Leu Val Pro Phe Lys Val Ile
                20             25             30
Leu Pro Cys Trp Gly Arg Cys Ser Ser Ser Phe Gln Arg Arg Lys Arg
                35             40             45
Gly Trp Gly Val Ala Gly Arg Gly Ser Ser Arg Pro Glu Ser Gln Ser
                50             55             60
Arg Trp Arg Ala Ala Ser Thr Arg Phe Leu Leu Val Gly Leu Arg Gln
 65             70             75             80
Gly Leu Ala Pro Gly Leu Ser Gly Lys Arg Glu Glu Glu Leu Arg Leu
                85             90             95
Arg Gly Ala Val Leu Pro Arg Arg Leu Thr Gly
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<210> 2521

<211> 4291

<212> DNA

<213> Homo sapiens

<400> 2521
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<210> 2522

<211> 952

<212> PRT

<213> Homo sapiens

<400> 2522

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Gly	Gly	Pro	Ala	Pro	Gly	Cys	Ser	Arg	Arg	Thr	Pro	Pro	Pro	Pro	Met
			20					25					30		
Ala	Pro	Leu	Ala	Leu	Val	Gly	Val	Thr	Leu	Leu	Leu	Ala	Ala	Pro	Pro
		35				40						45			
Cys	Ser	Gly	Ala	Ala	Thr	Pro	Thr	Pro	Ser	Leu	Pro	Pro	Pro	Pro	Ala
	50					55				60					
Asn	Asp	Ser	Asp	Thr	Ser	Thr	Gly	Gly	Cys	Gln	Gly	Ser	Tyr	Arg	Cys

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Gln	Pro	Gly	Val	Leu	Leu	Pro	Val	Trp	Glu	Pro	Asp	Asp	Pro	Ser
				85					90					95
Gly	Asp	Lys	Ala	Ala	Arg	Ala	Val	Val	Tyr	Phe	Val	Ala	Met	Val
			100						105					110
Met	Phe	Leu	Gly	Val	Ser	Ile	Ile	Ala	Asp	Arg	Phe	Met	Ala	Ala
			115						120					125
Glu	Val	Ile	Thr	Ser	Lys	Glu	Lys	Glu	Ile	Thr	Ile	Thr	Lys	Ala
			130						135					140
Gly	Glu	Thr	Ser	Val	Gly	Thr	Val	Arg	Ile	Trp	Asn	Glu	Thr	Val
			145						150					155
Asn	Leu	Thr	Leu	Met	Ala	Leu	Gly	Ser	Ser	Ala	Pro	Glu	Ile	Leu
				165					170					175
Ser	Val	Ile	Glu	Val	Cys	Gly	His	Asn	Phe	Gln	Ala	Gly	Glu	Leu
			180						185					190
Pro	Gly	Thr	Ile	Val	Gly	Ser	Ala	Ala	Phe	Asn	Met	Phe	Val	Val
			195						200					205
Ala	Val	Cys	Ile	Tyr	Val	Ile	Pro	Ala	Gly	Glu	Ser	Arg	Lys	Ile
			210						215					220
His	Leu	Arg	Val	Phe	Phe	Val	Thr	Ala	Ser	Trp	Ser	Ile	Phe	Ala
			225						230					235
Val	Trp	Leu	Tyr	Leu	Ile	Leu	Ala	Val	Phe	Ser	Pro	Gly	Val	Val
				245					250					255
Val	Trp	Glu	Ala	Leu	Leu	Thr	Leu	Val	Phe	Phe	Pro	Val	Cys	Val
			260						265					270
Phe	Ala	Trp	Met	Ala	Asp	Lys	Arg	Leu	Leu	Phe	Tyr	Lys	Tyr	Val
			275						280					285
Lys	Arg	Tyr	Arg	Thr	Asp	Pro	Arg	Ser	Gly	Ile	Ile	Ile	Gly	Ala
			290						295					300
Gly	Asp	Pro	Pro	Lys	Ser	Ile	Glu	Leu	Asp	Gly	Thr	Phe	Val	Gly
			305						310					315
Glu	Ala	Pro	Gly	Glu	Leu	Gly	Gly	Leu	Gly	Pro	Gly	Pro	Ala	Glu
			325						330					335
Arg	Glu	Leu	Asp	Ala	Ser	Arg	Arg	Glu	Val	Ile	Gln	Ile	Leu	Lys
			340						345					350
Leu	Lys	Gln	Lys	His	Pro	Asp	Lys	Asp	Leu	Glu	Gln	Leu	Val	Gly
			355						360					365
Ala	Asn	Tyr	Tyr	Ala	Leu	Leu	His	Gln	Gln	Lys	Ser	Arg	Ala	Phe
			370						375					380
Arg	Ile	Gln	Ala	Thr	Arg	Leu	Met	Thr	Gly	Ala	Gly	Asn	Val	Leu
			385						390					395
Arg	His	Ala	Ala	Asp	Ala	Ser	Arg	Arg	Ala	Ala	Pro	Ala	Glu	Gly
			405						410					415
Gly	Glu	Asp	Glu	Asp	Asp	Gly	Ala	Ser	Arg	Ile	Phe	Phe	Glu	Pro
			420						425					430
Leu	Tyr	His	Cys	Leu	Glu	Asn	Cys	Gly	Ser	Val	Leu	Leu	Ser	Val
			435						440					445
Cys	Gln	Gly	Gly	Glu	Gly	Asn	Ser	Thr	Phe	Tyr	Val	Asp	Tyr	Arg
			450						455					460
Glu	Asp	Gly	Ser	Ala	Lys	Ala	Gly	Ser	Asp	Tyr	Glu	Tyr	Ser	Glu
			465						470					475
Thr	Leu	Val	Phe	Lys	Pro	Gly	Glu	Thr	Gln	Lys	Glu	Leu	Arg	Ile
			485						490					495
Ile	Ile	Asp	Asp	Asp	Ile	Phe	Glu	Glu	Asp	Glu	His	Phe	Phe	Val
														Arg

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<210> 2523
 <211> 392
 <212> DNA
 <213> Homo sapiens

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 180
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 240
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 300
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 360
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<210> 2524
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 2524
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 Val Val Asp Val Phe Ser Arg Lys Ile Val Gly Val Ala Thr Arg Ser
 20 25 30
 Thr Met Arg Thr Asp Ala Leu Pro Met Glu Ala Leu Glu His Ala Leu
 35 40 45
 Thr Thr Ala Gly Arg Ile His Gly Asn Gln Leu Ile His His Ser Asp
 50 55 60
 Arg Gly Ser Gln Tyr Val Ser Leu Lys Tyr Ser Thr Ala Leu Ala Glu
 65 70 75 80
 Ser Gly Ile Arg Pro Ser Val Gly Thr Val Gly Asp Ser Tyr Asp Asn
 85 90 95
 Ala Leu Ala Glu Thr Val Asn Gly Leu Tyr Lys Ala Glu Leu Ile His
 100 105 110
 Ala Gln Gly Pro Trp Thr Ser Val Gly Glu Val Glu Leu Ala Thr Leu
 115 120 125
 Arg Xaa
 130

<210> 2525
 <211> 378
 <212> DNA
 <213> Homo sapiens

<400> 2525
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 180
 tgattcatat ctccgatatc agcacgacag gggcgtcatt ccgctctgca catcggcttg
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<210> 2526
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 2526
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 20 25 30
 Arg Gly Arg Gln Asp Val Gly Gln Arg Arg Ala Pro Xaa Met Ile His
 35 40 45
 Ile Ser Asp Ile Ser Thr Thr Gly Ala Ser Phe Arg Ser Ala His Arg
 50 55 60
 Leu Gly Ser Gln Arg Cys Ala Arg Thr Pro Ala Ile Ser Gly Glu Asp
 65 70 75 80
 Ala Arg Leu Pro Phe Arg Thr Gly Gly Arg Asn Thr His Ser Gln Arg
 85 90 95
 Glu Ala Arg Arg Phe Ala Gln His Leu Ser Ile Arg Arg Gly Ile
 100 105 110

<210> 2527
 <211> 305
 <212> DNA
 <213> Homo sapiens

<400> 2527
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<210> 2528
<211> 101
<212> PRT
<213> Homo sapiens

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35 40 45
Asp Arg Pro Thr Ile Ser Thr Ala Ser Glu Thr Ser Val Tyr Val Thr
50 55 60
Trp Ile Pro Arg Gly Asn Gly Gly Phe Pro Ile Gln Ser Phe Arg Val
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Glu Tyr Lys Lys Leu Lys Lys Val Gly Asp Trp Ile Leu Ala Thr Ser
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Ala Ile Pro Pro Arg
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<210> 2529
<211> 387
<212> DNA
<213> Homo sapiens

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<210> 2530
<211> 121
<212> PRT
<213> Homo sapiens

<400> 2530
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      35                40                45
Ser His Thr Gln Glu Pro Ser Gln Gln Pro Pro Pro Trp Leu Ser Arg
      50                55                60
Tyr Thr Arg Val Thr Ala Glu Thr Arg Arg Ser Lys Pro Gly Asp Thr
      65                70                75                80
Ser His Gln Gly Asp Cys Val Gly Glu Arg Ala Ser Arg Pro Leu Gly
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Asp Arg Asp Pro Pro Arg Gly Asp Ala
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<210> 2531

<211> 396

<212> DNA

<213> Homo sapiens

<400> 2531

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396

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<210> 2532

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2532

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Ser Ser Val Lys Asp Met Leu Ala Phe Leu Phe Leu Pro Asp Ile Pro
      35      40      45
Glu Ser Arg Glu Leu Ser Cys Asn Ala Ser Asn Pro Leu Gly Leu Asn
      50      55      60
Ser Phe Pro Arg Glu Thr Arg Ser Thr Val Arg Ser Gln Gly Pro Pro
      65      70      75      80
Cys Leu Ala Arg Ala Ser Leu Leu Ser Arg Gln Gly Pro Ala Ala Ser
      85      90      95
Thr His Val Gln Gly Lys Glu Gly Arg

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100

105

<210> 2533
 <211> 495
 <212> DNA
 <213> Homo sapiens

<400> 2533
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 120
 aggcgctacc ggggtctcct gcaactgtatg gtgaccagcg ttcgagagga gggaccccg
 180
 gtccctttca aggggctggt actcaattgc tgccgcgcct tccctgtcaa catgggtggtc
 240
 ttctgcgcct atgaggcagt gctgaggctc gccgggggtc tgctcacata gccggtcccc
 300
 acgcccagcg gccccaccac cagcagctgc tggaggctgt agtggctgga ggaggcaagg
 360
 ggtagtgtgg ctgggttcgg gacccacacag ggccattgcc caggagaatg aggagcctcc
 420
 ctgcagtgtt gtcggccgag gcctgagctc gccctgccca gctactgacc tcaggctcag
 480
 gggcccgcca gccat
 495

<210> 2534
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 2534
 Xaa Arg Pro Asp Val Pro Gly Val Leu Val Ala Gly Gly Cys Ala Gly
 1 5 10 15
 Val Leu Ala Trp Ala Val Ala Xaa Pro Met Asp Val Ile Lys Ser Arg
 20 25 30
 Leu Gln Ala Asp Gly Gln Gly Gln Arg Arg Tyr Arg Gly Leu Leu His
 35 40 45
 Cys Met Val Thr Ser Val Arg Glu Gly Pro Arg Val Leu Phe Lys
 50 55 60
 Gly Leu Val Leu Asn Cys Cys Arg Ala Phe Pro Val Asn Met Val Val
 65 70 75 80
 Phe Val Ala Tyr Glu Ala Val Leu Arg Leu Ala Arg Gly Leu Leu Thr
 85 90 95

<210> 2535
 <211> 1904
 <212> DNA
 <213> Homo sapiens

<400> 2535
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 60

cgctcggtgggt aggctgctac catgaggttg aatcagaaca ccttgctgct ggggaagaag
120
gtgggtccttg taccctacac ctccggagcat gtgccacga ggtaccacga gtggatgaaa
180
tcagaggagc tgcagcgttt gacagcctcg gagccgctga ccctggagca ggagtatgcc
240
atgcagtgcg gctggcagga agatgcagac aagtgtacct tcattgtgct ggatgccgag
300
aagtggcagg ccagccagg cgccaccgaa gagagctgca tgggtgggaga cgtgaacctc
360
ttcctcacag atctagaaga cccacacctg ggggagatcg aggtcatgat tgcagagccc
420
agctgcaggg gtaagggcct tggcactgag gccgttctcg cgatgctgct ttacggagtg
480
accacgctag gtctgaccaa gtttgaggct aaaattgggc aaggaaatga accaagcatc
540
cggtatgttc agaaacttca ctttgagcag gtggctacga gcagtgtttt tcaggagggtg
600
accctcagac tgacagtgag tgagtccgag catcagtggc ttctggagca gaccagccac
660
gtggaagaga agccttacag agatgggtcg gcagagccct gctgatggct gggccttgtg
720
ggcagccact ctgtgtgagc aggggtgttg gccatacac ttcaagacc agagccctgc
780
actggggagag tgctcctggc ccaggctggg aatcaccttt cgaggccctt cagactctgg
840
cggggcttgc tgtggcctcc ctccagctag tgggtgtggc gagcagactc caggggcagg
900
gccagttccc ttctccctcc ccggccaaac ccagaccag actctaggaa gctggaatgg
960
agggcaggga tccatgggag atgtcgggat gaagtgagg gctggagggt cagggggacc
1020
tggaacatgg atgggagtg acaggccttt ctcccttagag gccagagggt ctgcctggc
1080
tgggagtga gctccaggca ctaccagctt tcctgatttt cccgtttggt ccattgtgaag
1140
agctaccag agccccagcc tcacagtgtc cactcaaggg cagcttggtc ctcttgcct
1200
gcagaggcag gctggtgtga ccctgggaac ttgacccggg aacaacagg gtgccagagt
1260
gagtgtggcc tggccctca acctagtgtc cgtcctctc tctcctggag ccagtcttga
1320
gtttaaaggc attagtgtta gatacagctc cttgtggctg gaaaaccccc ctctgctgat
1380
aaagctcagg gggcactgag gaagcagagg ccccttgggg gtgccctcct gaagagagcg
1440
tcaggccatc agctctgtcc ctctgggtgct cccacgtctg ttccctcccc tccatctctg
1500
ggagcagctg cacctgactg gccacgcggg ggagtgagg gcacaggctc aggggtggcg
1560
ggctacctgg caccctatgg cttacaaagt agagtggcc cagtttccct ccacctgagg
1620
ggagcactct gactcctaac agtcttctct gccctgccat catctggggg ggctggctgt
1680

caagaaaggc cgggcatgct ttctaaacac agccacagga ggcttgtagg gcattctcca
 1740
 ggtggggaaa cagtcttaga taagtaaggt gacttgccca aggcctccca gcacccttga
 1800
 tcttggaagtc tcacagcaga ctgcatgtga acaactggaa cggaaaaaat gcctcagtat
 1860
 aaaacaaaca ttataaaacg aaaaaaaaaa aaaaaaaaaa tact
 1904

<210> 2536

<211> 207

<212> PRT

<213> Homo sapiens

<400> 2536

Met	Arg	Leu	Asn	Gln	Asn	Thr	Leu	Leu	Leu	Gly	Lys	Lys	Val	Val	Leu
1			5					10					15		
Val	Pro	Tyr	Thr	Ser	Glu	His	Val	Pro	Ser	Arg	Tyr	His	Glu	Trp	Met
			20				25						30		
Lys	Ser	Glu	Glu	Leu	Gln	Arg	Leu	Thr	Ala	Ser	Glu	Pro	Leu	Thr	Leu
		35					40					45			
Glu	Gln	Glu	Tyr	Ala	Met	Gln	Cys	Ser	Trp	Gln	Glu	Asp	Ala	Asp	Lys
		50				55					60				
Cys	Thr	Phe	Ile	Val	Leu	Asp	Ala	Glu	Lys	Trp	Gln	Ala	Gln	Pro	Gly
65				70					75						80
Ala	Thr	Glu	Glu	Ser	Cys	Met	Val	Gly	Asp	Val	Asn	Leu	Phe	Leu	Thr
			85						90				95		
Asp	Leu	Glu	Asp	Pro	Thr	Leu	Gly	Glu	Ile	Glu	Val	Met	Ile	Ala	Glu
			100					105					110		
Pro	Ser	Cys	Arg	Gly	Lys	Gly	Leu	Gly	Thr	Glu	Ala	Val	Leu	Ala	Met
			115				120					125			
Leu	Ser	Tyr	Gly	Val	Thr	Thr	Leu	Gly	Leu	Thr	Lys	Phe	Glu	Ala	Lys
			130			135					140				
Ile	Gly	Gln	Gly	Asn	Glu	Pro	Ser	Ile	Arg	Met	Phe	Gln	Lys	Leu	His
145				150						155					160
Phe	Glu	Gln	Val	Ala	Thr	Ser	Ser	Val	Phe	Gln	Glu	Val	Thr	Leu	Arg
			165					170						175	
Leu	Thr	Val	Ser	Glu	Ser	Glu	His	Gln	Trp	Leu	Leu	Glu	Gln	Thr	Ser
			180					185					190		
His	Val	Glu	Glu	Lys	Pro	Tyr	Arg	Asp	Gly	Ser	Ala	Glu	Pro	Cys	
			195				200						205		

<210> 2537

<211> 509

<212> DNA

<213> Homo sapiens

<400> 2537

acgcgttctc gtaaggacaa gcttgacgcc gaggtgcatg ccggtgaagg caccctcggg
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 gatgtcatcg tgctgcgggt ttccggagcc atggcgaagc gtctctcctc agttatcctt
 120
 ccgtgctac tgctcgactc ccccgctcatt gcgtggtggc ccttctccgg ccttgacaa
 180

ctcgccctcg accccatcgg agcccttcgg gaccgccgca tcaccgactc ggcagctgac
 240
 aaagatccgt gcaaagccct catacgccgt gcggctcacc taaccgaggg tgactccgac
 300
 ctgtgttggg ctgcaccac cagctggaga gccctagctg cagcagcttt ggatcaacat
 360
 ccagcgaccg tcaagttcgc tcgggtagag tcagccgccg gtaatgcccc ggcgatgctg
 420
 ctggcagcct ggctaggatt gcgtctcggc gtcccggtcg agcgggtgac aaccgacgcg
 480
 cccggcatct ccgcgatcgt catgtcgac
 509

<210> 2538

<211> 169

<212> PRT

<213> Homo sapiens

<400> 2538

Thr	Arg	Ser	Arg	Lys	Asp	Lys	Leu	Asp	Ala	Glu	Val	His	Ala	Gly	Glu
1				5					10					15	
Gly	Thr	Pro	Gly	Asp	Val	Ile	Val	Leu	Arg	Phe	Ser	Gly	Ala	Met	Ala
			20					25					30		
Lys	Arg	Pro	Ala	Ser	Val	Ile	Leu	Pro	Leu	Leu	Leu	Ser	Asp	Ser	Pro
		35					40					45			
Val	Ile	Ala	Trp	Trp	Pro	Phe	Ser	Gly	Pro	Asn	Leu	Ala	Ser	Asp	
	50					55				60					
Pro	Ile	Gly	Ala	Leu	Ala	Asp	Arg	Arg	Ile	Thr	Asp	Ser	Ala	Ala	Asp
65				70						75				80	
Lys	Asp	Pro	Cys	Lys	Ala	Leu	Ile	Arg	Arg	Ala	Ala	His	Leu	Thr	Glu
			85						90				95		
Gly	Asp	Ser	Asp	Leu	Cys	Trp	Ala	Arg	Thr	Thr	Ser	Trp	Arg	Ala	Leu
			100					105					110		
Ala	Ala	Ala	Ala	Leu	Asp	Gln	His	Pro	Ala	Thr	Val	Lys	Phe	Ala	Arg
		115				120						125			
Val	Glu	Ser	Ala	Ala	Gly	Asn	Ala	Pro	Ala	Met	Leu	Leu	Ala	Ala	Trp
	130					135					140				
Leu	Gly	Leu	Arg	Leu	Gly	Val	Pro	Val	Glu	Arg	Val	Thr	Thr	Asp	Ala
145				150					155					160	
Pro	Gly	Ile	Ser	Ala	Ile	Val	Met	Ser							
					165										

<210> 2539

<211> 453

<212> DNA

<213> Homo sapiens

<400> 2539

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 60
 tcgcggcatg acccgaggat agtgacgtgg gacaatggct acgtgcgttt tctcaacgag
 120
 cagccgaact acgacctgac gtatgacgac gtcttcatgg caccaaacgg ttcctcggtg
 180

gggtccccga tgaacgtoga cctcacgtca acagacgggc taggcactcc tctgcccctc
 240
 gtagtgccca atatgaccgc aatttcogga cgctgcattg cacagaccat cgccaggcgc
 300
 ggaggcattg ctgttctgccc ccaagatata ccggcgggatt tcgtgcgccg gtccattcgg
 360
 cgcgtcaaa atgcgcatac tcgattcgac accccagtcg ccgtcaaccc gacaacgact
 420
 gtcggtgagg ccatgaactt gctcaacaag cgc
 453

<210> 2540

<211> 134

<212> PRT

<213> Homo sapiens

<400> 2540

Phe	Ala	Ala	Ser	Arg	His	Asp	Pro	Arg	Ile	Val	Thr	Trp	Asp	Asn	Gly
1				5					10					15	
Tyr	Val	Arg	Phe	Leu	Asn	Glu	Gln	Pro	Asn	Tyr	Asp	Leu	Thr	Tyr	Asp
			20				25					30			
Asp	Val	Phe	Met	Ala	Pro	Asn	Arg	Ser	Ser	Val	Gly	Ser	Arg	Met	Asn
	35					40					45				
Val	Asp	Leu	Thr	Ser	Thr	Asp	Gly	Leu	Gly	Thr	Pro	Leu	Pro	Leu	Val
	50				55					60					
Val	Ala	Asn	Met	Thr	Ala	Ile	Ser	Gly	Arg	Arg	Met	Ala	Glu	Thr	Ile
65				70					75					80	
Ala	Arg	Arg	Gly	Gly	Ile	Ala	Val	Leu	Pro	Gln	Asp	Ile	Pro	Ala	Asp
			85					90					95		
Phe	Val	Ala	Arg	Ser	Ile	Arg	Arg	Val	Lys	Asp	Ala	His	Thr	Arg	Phe
			100					105					110		
Asp	Thr	Pro	Val	Thr	Val	Asn	Pro	Thr	Thr	Thr	Val	Gly	Glu	Ala	Met
			115				120					125			
Asn	Leu	Leu	Asn	Lys	Arg										
			130												

<210> 2541

<211> 564

<212> DNA

<213> Homo sapiens

<400> 2541

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 ccctgcattg aaccatttgc agggcacacg cagtctacat gtatcccagg ttttatgtct
 120
 acagagcctg caatactccg tgtctggaat acgttatttg ctgcacacct ccagaggaa
 180
 catgtaacgt ctgtgtaaca tgctatcctg cacacatctg aaagaatctg tgtacacaa
 240
 actattatgc tgtgcacaca tttcctcata ttctgtgtag agagcacctc attttgtact
 300
 caaatattgc gttccataa caagttacat tgctcacatc ttaaaatatt cattacacgt
 360

gaaaccaccg catggtaccg acatccttct ggaatgtccc gcacagaggc tgatatatgt
 420
 gcacagttct cactgttctg cgtgccccagc ccctcacact ggacgcccac ctcacactct
 480
 tctgccaaag gagactttgg ttctccctct cctgtgtgctg gctgtgcggg ccacagtctc
 540
 ctgcacgcca gcagcatgac gcgt
 564

<210> 2542

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2542

Met	Leu	Cys	Thr	His	Phe	Leu	Ile	Phe	Cys	Val	Glu	Ser	Thr	Ser	Phe
1				5					10					15	
Cys	Thr	Gln	Ile	Phe	Gly	Phe	His	Asn	Lys	Leu	His	Cys	Ser	His	Leu
		20						25				30			
Lys	Ile	Phe	Ile	Thr	Arg	Glu	Thr	Thr	Ala	Trp	Tyr	Arg	His	Pro	Ser
	35					40					45				
Gly	Met	Ser	Arg	Thr	Glu	Ala	Asp	Ile	Cys	Ala	Gln	Phe	Ser	Leu	Phe
	50				55					60					
Cys	Val	Pro	Ser	Pro	Ser	His	Trp	Thr	Pro	Thr	Ser	His	Ser	Ser	Ala
65				70					75					80	
Lys	Gly	Asp	Phe	Gly	Ser	Pro	Leu	Pro	Cys	Ala	Gly	Cys	Ala	Gly	His
			85					90						95	
Ser	Pro	Leu	His	Ala	Ser	Ser	Met	Thr	Arg						
			100					105							

<210> 2543

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2543

cgccctgaagg gggcggggaa aatggaatgg gggggaaggg cgcgggtggg gacatgctgg
 60
 aacgtgcccc tgctttctgc accacactgg atgactgaag gggaagggaac gagcgtctta
 120
 ccgctcctga tgagattttt gtttttgctt aacaaagaaa tgtgtatgaa tgcacgtctg
 180
 ttgtcagggg cagggaggag gagggtcctt ggaatagctg ccgacaacag ctggaactcc
 240
 tgtctgggtc cccagctgg gctagagagg gcagtgatca tctgtccact ggacaggaag
 300
 gtttgcaaaag ggctgtttgc ttactgggtc ccaattttta gccttctgaa gccctgtgcc
 360
 aatggggccc agcaggcagc agtgctg
 387

<210> 2544

<211> 122

<212> PRT

<213> Homo sapiens

<400> 2544

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Met Glu Trp Gly Gly Arg Ala Arg Val Gly Thr Cys Trp Asn Val Pro
 1             5             10             15
Met Leu Ser Ala Pro His Trp Met Thr Glu Gly Thr Ser Val
          20             25             30
Leu Pro Leu Leu Met Arg Phe Leu Phe Leu Pro Asn Lys Glu Met Cys
          35             40             45
Met Asn Ala Arg Leu Phe Ala Gly Ala Gly Arg Arg Val Leu Gly
          50             55             60
Ile Ala Ala Asp Asn Ser Trp Asn Ser Cys Leu Gly Pro Pro Ala Gly
65             70             75             80
Leu Glu Arg Ala Val Ile Ile Cys Pro Leu Asp Arg Lys Val Cys Lys
          85             90             95
Gly Leu Phe Ala Tyr Trp Val Pro Ile Phe Ser Leu Leu Lys Pro Leu
          100            105            110
Ser Asn Gly Ala Gln Gln Ala Ala Val Leu
          115            120

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<210> 2545

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2545

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gcgattatatt tcgtgctgcc cggacttattc atggtcggct ggtggtcagg tttcccgtag
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tggaaccaccc tcgctatctg tctagtcggc gccatcctcg gcgttatgta ctgcattccg
120
ctgcgctcggg ccctcgtgac aggctcggat cttccctacc cggagggcgt cgcaggagct
180
gaggtgctca aagtaggcga ttccgctggt gccgccgagg ctaacaagg tgggtctgcga
240
gtcatcatcg tcggttctgt ggtctctgca gcgtacgccc tgttgcgga tcttaagctt
300
gtgaagtcgg cgctgaccaa gcctttcaag acggggc
336

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<210> 2546

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2546

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Ala Ile Ile Phe Val Leu Pro Gly Leu Ile Met Val Gly Trp Trp Ser
 1             5             10             15
Gly Phe Pro Tyr Trp Thr Thr Leu Ala Ile Cys Leu Val Gly Gly Ile
          20             25             30
Leu Gly Val Met Tyr Ser Ile Pro Leu Arg Arg Ala Leu Val Thr Gly
          35             40             45
Ser Asp Leu Pro Tyr Pro Glu Gly Val Ala Gly Ala Glu Val Leu Lys
          50             55             60
Val Gly Asp Ser Ala Gly Ala Ala Glu Ala Asn Lys Val Gly Leu Arg

```

```

65              70              75              80
Val Ile Ile Val Gly Ser Val Val Ser Ala Ala Tyr Ala Leu Leu Ser
      85              90              95
Asp Leu Lys Leu Val Lys Ser Ala Leu Thr Lys Pro Phe Lys Thr Gly
      100              105              110

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<210> 2547
 <211> 556
 <212> DNA
 <213> Homo sapiens

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<400> 2547
acgcgtgcac acacacacac gcaggcgtag acgctcaca gtgcacacac acatatgagt
60
ttccacaca tctcaccata tcaactttctc tttacttttt aaagacaggg cacttgccct
120
tatggccaat aatattatgc ccaagctaca acattccgag tcaatcaca aggttataaa
180
cttcatttga actgaagacc acctgtaagc acgcagctca aatgtttctca cctagaaatt
240
caagttgtgt ttgaaaagt gacttaacgg tcaaaagaaa aggcctggcc aacttcagag
300
agggacaccc agccctgcta cggtgcgtgt cattatgtgg tgctgtgcta tccatagaga
360
aagaggagat gaaaagatt ctacaaagag agatcaaact gcaagaaagc acaagattt
420
catcaccaca atatgaaggc ctccctggta taaatgactt ttttaggtcc caataagaaa
480
taccatctat tctatctgga attattttat tagcttcaaa ttttattcta agattcatac
540
tatcagatca tctaga
556

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<210> 2548
 <211> 106
 <212> PRT
 <213> Homo sapiens

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<400> 2548
Met Asn Leu Arg Ile Lys Phe Glu Ala Asn Lys Ile Ile Pro Asp Arg
1      5      10      15
Ile Asp Gly Ile Ser Tyr Trp Asp Leu Lys Lys Ser Phe Ile Pro Arg
20     25     30
Arg Pro Ser Tyr Cys Gly Asp Glu Ile Phe Val Leu Ser Cys Ser Leu
35     40     45
Ile Ser Leu Cys Arg Ile Phe Phe Ile Ser Ser Phe Ser Met Asp Ser
50     55     60
Thr Ala Pro His Asn Asp Thr Gln Arg Ser Arg Ala Gly Cys Pro Ser
65     70     75     80
Leu Lys Leu Ala Arg Pro Phe Ser Leu Thr Val Lys Ser Thr Phe Gln
85     90     95
Thr Gln Leu Glu Phe Leu Gly Glu Asn Ile
100    105

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<210> 2549
 <211> 435
 <212> DNA
 <213> Homo sapiens

<400> 2549
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 60
 atcgatgata atgggtgcgg catgtctcgt gaagaagcca ttacaaactt aggtacgatt
 120
 gctaaaatcgg gcacctcttc tttcttagag caattgagtg gcgatcagaa aaaagacagc
 180
 caacttattg gtcaattcgg tgtaggcttt tactctgctt tcctcggtgc tgataaagta
 240
 acagtagaaa cacgtcgcgc aggtgcgacg gaaaatgaag cggttcgctg ggtatctgat
 300
 ggttctgggt aatttactat tgagacgacg gataaagcga ctcggtggta acgcattact
 360
 ttgcatctga aagcagatga aaaagatttc gcagacaact tccgtctacg ttcattagta
 420
 acaaaatatt ctgat
 435

<210> 2550
 <211> 145
 <212> PRT
 <213> Homo sapiens

<400> 2550
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 Asn Thr Val Val Ile Asp Asp Asn Gly Val Gly Met Ser Arg Glu Glu
 20 25 30
 Ala Ile Thr Asn Leu Gly Thr Ile Ala Lys Ser Gly Thr Ser Ser Phe
 35 40 45
 Leu Glu Gln Leu Ser Gly Asp Gln Lys Lys Asp Ser Gln Leu Ile Gly
 50 55 60
 Gln Phe Gly Val Gly Phe Tyr Ser Ala Phe Ile Val Ala Asp Lys Val
 65 70 75 80
 Thr Val Glu Thr Arg Arg Ala Gly Ala Thr Glu Asn Glu Ala Val Arg
 85 90 95
 Trp Val Ser Asp Gly Ser Gly Glu Phe Thr Ile Glu Thr Ile Asp Lys
 100 105 110
 Ala Thr Arg Gly Thr Arg Ile Thr Leu His Leu Lys Ala Asp Glu Lys
 115 120 125
 Asp Phe Ala Asp Asn Phe Arg Leu Arg Ser Leu Val Thr Lys Tyr Ser
 130 135 140
 Asp
 145

<210> 2551
 <211> 403
 <212> DNA
 <213> Homo sapiens

<400> 2551
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 60
 ggactccact tctggggacg cctgggttcgt tcgcccacca ggccataggct acgctccatg
 120
 ctccccacgc aatctctgtc tacacctctc gcggcgccctt gccctcctcc gacccctttc
 180
 cagccannaa gtccccccac cccttcagag aagcagcctc aaattccaga agtggaggct
 240
 ccagccctccc cgcgaggtag cagccccaca gtcttctggg agccattgtg gccagggagc
 300
 gcctctggac tgccaggctg ggttggggac cagggaaact cggtctactc aggtgtgagg
 360
 gggcaggtct ggcctgcccc aaagttggct ccatcctgga can
 403

<210> 2552
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 2552
 Xaa Pro Ala Ser Leu Thr Ser Val Ser Pro Pro Arg Gly Arg Leu Ser
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 Thr Leu Asn Arg Gly Leu His Phe Trp Gly Arg Leu Val Arg Ser Pro
 20 25 30
 Thr Arg Pro Arg Leu Arg Ser Met Leu Pro Gln Gln Ser Leu Ser Thr
 35 40 45
 Pro Pro Ala Ala Pro Cys Pro Pro Pro Thr Pro Phe Gln Pro Xaa Ser
 50 55 60
 Pro Pro Thr Pro Ser Glu Lys Gln Pro Gln Ile Pro Glu Val Glu Ala
 65 70 75 80
 Pro Ala Ser Pro Arg Gly Thr Ser Pro Thr Val Phe Trp Glu Pro Leu
 85 90 95
 Trp Pro Gly Thr Ala Ser Gly Leu Pro Gly Trp Val Gly Asp Gln Gly
 100 105 110
 Thr Ser Val Tyr Ser Gly Val Arg Gly Gln Val Trp Pro Ala Pro Lys
 115 120 125
 Leu Ala Pro Ser Trp Thr
 130

<210> 2553
 <211> 380
 <212> DNA
 <213> Homo sapiens

<400> 2553
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 gagagatata gcattgggcca aggagcactg ggagccagca gcagctggaa gaggcaggag
 120
 gcctcctccc tagaccgcac aggatgctac tgggtgagcc tgctgtcctg gaaaaggcgt
 180

gaagtctgcc tgagtgggca ggggcttctg cgcagcacc agcaaggcca aggtggaagg
 240
 gaccctctg gcccctgtcc tggctccacc ctcagctgct ggcaggtggg tcaccaggcc
 300
 tctgccc aaa gaaactcctg caggcagctc tggacccct gtcttacaca ccttctcact
 360
 gagcctgcc gcatccagn
 380

<210> 2554

<211> 111

<212> PRT

<213> Homo sapiens

<400> 2554

Met	Lys	Gln	Arg	Leu	Glu	Arg	Tyr	Ser	Met	Gly	Gln	Gly	Ala	Leu	Gly
1				5					10					15	
Ala	Ser	Ser	Ser	Trp	Lys	Arg	Gln	Glu	Ala	Ser	Ser	Leu	Asp	Arg	Thr
			20				25						30		
Gly	Cys	Tyr	Trp	Val	Ser	Leu	Leu	Ser	Trp	Lys	Arg	Arg	Glu	Val	Cys
	35						40				45				
Leu	Ser	Gly	Gln	Gly	Leu	Leu	Arg	Ser	Thr	Gln	Gln	Gly	Gln	Gly	Gly
	50				55					60					
Arg	Asp	Pro	Pro	Gly	Pro	Cys	Pro	Gly	Ser	Thr	Leu	Ser	Cys	Trp	Gln
65					70				75					80	
Val	Gly	His	Gln	Ala	Ser	Ala	Gln	Arg	Asn	Ser	Cys	Arg	Gln	Leu	Trp
			85					90						95	
Thr	Pro	Cys	Leu	Thr	His	Leu	Leu	Thr	Glu	Pro	Ala	Ser	Ile	Pro	
			100					105						110	

<210> 2555

<211> 368

<212> DNA

<213> Homo sapiens

<400> 2555

ntccg gatgg aaaagtaag accagcaata gccataacg ccattaacac ataccat at
 60
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 120
 gataacgcga ataattggtag tgctgttcta gtgtcacacg acctgtgtc ccaaatagaa
 180
 ggatttatat cctcccatat cctcattttt gtgtcgtgtt gcctcggcat tgtctttacc
 240
 gttgccactc gaggtgtaca gtccgcctc ttccgggcaca tgtggcacct catgtctgat
 300
 tcacggaagc aaaagggcac ctccctctcc agctctcaag cattcacagt gggctctgat
 360
 cagcggn
 368

<210> 2556

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2556

```

Met Leu Leu Met Leu Pro Gly Ser Ser Val Ala Phe Phe Met Gly Asn
 1             5             10             15
Ser Leu Met Gly Asp Asn Ala Asn Asn Gly Ser Val Val Leu Val Leu
      20             25             30
Thr Asp Leu Val Thr Gln Ile Glu Gly Phe Ile Ser Ser His Ile Leu
      35             40             45
Ile Phe Val Leu Val Gly Leu Gly Ile Val Phe Thr Val Ala Thr Arg
      50             55             60
Gly Val Gln Phe Arg Leu Phe Gly His Met Trp His Leu Met Leu Asp
      65             70             75             80
Ser Arg Lys Gln Lys Gly Thr Ser Leu Ser Ser Ser Gln Ala Phe Thr
      85             90             95
Val Gly Leu Asp His Ala
      100

```

<210> 2557

<211> 408

<212> DNA

<213> Homo sapiens

<400> 2557

```

atcactactc cagttggtga ggcagttctg ggtcgcatct taaatgtgat cggtagccg
60
attgatgaga tgggccagct taacgcgaaa gaaaaatggg aaattcaccg tccagctcct
120
aaattcgaag accaagctgt taaagctgag atgttgatga ctggtattaa ggtcgttgat
180
cttcttgacac cttacgcaaa gggtaggcaag atcggtctct tcggtggtgc gggcgtaggt
240
aaaacagttt tgattcaaga gttgattcgt aacatcgcta ctgagcaccg tggatactct
300
gtattcgcag gtgtcggcga gcgtactcgc gaaggtaacg atctttgggt tgagatgaaa
360
gaatcaggcg ttatcgcaaa gaccgcactt gtattcggtc agatgaat
408

```

<210> 2558

<211> 136

<212> PRT

<213> Homo sapiens

<400> 2558

```

Ile Thr Thr Pro Val Gly Glu Ala Val Leu Gly Arg Ile Leu Asn Val
 1             5             10             15
Ile Gly Glu Pro Ile Asp Glu Met Gly Pro Val Asn Ala Lys Glu Lys
      20             25             30
Trp Glu Ile His Arg Pro Ala Pro Lys Phe Glu Asp Gln Ala Val Lys
      35             40             45
Ala Glu Met Leu Met Thr Gly Ile Lys Val Val Asp Leu Leu Ala Pro
      50             55             60
Tyr Ala Lys Gly Gly Lys Ile Gly Leu Phe Gly Gly Ala Gly Val Gly

```

```

65          70          75          80
Lys Thr Val Leu Ile Gln Glu Leu Ile Arg Asn Ile Ala Thr Glu His
      85          90          95
Gly Gly Tyr Ser Val Phe Ala Gly Val Gly Glu Arg Thr Arg Glu Gly
      100        105        110
Asn Asp Leu Trp Val Glu Met Lys Glu Ser Gly Val Ile Ala Lys Thr
      115        120        125
Ala Leu Val Phe Gly Gln Met Asn
      130        135

```

<210> 2559

<211> 389

<212> DNA

<213> Homo sapiens

<400> 2559

```

tccttgaaga tgaacatctt tcggctgcaa actgaaaagg atttgaatcc tcagaaaaca
60
gcttttctga aagatcgact gaatgcaata caggaagagc attctaagga cctgaagctg
120
ttgcattctcg aagttatgaa ttgtcgccag caactgagag ctgtaaaaga ggaagaagac
180
aaggcacaag atgaggtgca aaggttgact gccactctga agattgcctc gcagacaaaag
240
aagaatgcag ccattattga agaggaactg aagaccacaa aacgtaaaaa gaaccttaaa
300
attcaagagc ttctagagat gacctcattt ccaagttggt tgaagaaaaa aagaacctgc
360
aggatatctt tcaacaggaa catgaagaa
389

```

<210> 2560

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2560

```

Ser Leu Lys Met Asn Ile Phe Arg Leu Gln Thr Glu Lys Asp Leu Asn
1      5      10      15
Pro Gln Lys Thr Ala Phe Leu Lys Asp Arg Leu Asn Ala Ile Gln Glu
      20      25      30
Glu His Ser Lys Asp Leu Lys Leu Leu His Leu Glu Val Met Asn Leu
      35      40      45
Arg Gln Gln Leu Arg Ala Val Lys Glu Glu Glu Asp Lys Ala Gln Asp
      50      55      60
Glu Val Gln Arg Leu Thr Ala Thr Leu Lys Ile Ala Ser Gln Thr Lys
65      70      75      80
Lys Asn Ala Ala Ile Ile Glu Glu Glu Leu Lys Thr Thr Lys Arg Lys
      85      90      95
Met Asn Leu Lys Ile Gln Glu Leu Leu Glu Met Thr Ser Phe Pro Ser
      100      105      110
Trp Leu Lys Lys Ile Arg Thr Cys Arg Ile Ser Phe Asn Arg Asn Met
      115      120      125
Lys

```

<210> 2561
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 2561
 nnactcaccca ctgtggttct actatgcctt ctgaccccggt cttggacttc aactgggaga
 60
 atgtggagcc atttgaacag gctcctcttc tggagcatat tttcttctgt cacttgtaga
 120
 aaagctgtat tggattgtga ggcaatgaaa acaaatgaat tcccttctcc atgtttggag
 180
 tcaaagacta aggtgggttat gaagggtcaa aatgtatcta tgttttgttc ccataagaac
 240
 aaatcactgc agatcaccta ttcattgttt cgacgtaaga cacacctggg aaccaggat
 300
 ggaaaagggtg aacctgcgat ttttaacct aagcatcacag aagcccatga atcaggcccc
 360
 tacaaaatgca aagcccaagt taccagctgt tcaaaatata gtctgtgactt cagcttcacg
 420
 attgtcgac
 429

<210> 2562
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 2562
 Xaa Leu Thr Thr Val Val Leu Leu Cys Leu Leu Thr Pro Ser Trp Thr
 1 5 10 15
 Ser Thr Gly Arg Met Trp Ser His Leu Asn Arg Leu Leu Phe Trp Ser
 20 25 30
 Ile Phe Ser Ser Val Thr Cys Arg Lys Ala Val Leu Asp Cys Glu Ala
 35 40 45
 Met Lys Thr Asn Glu Phe Pro Ser Pro Cys Leu Asp Ser Lys Thr Lys
 50 55 60
 Val Val Met Lys Gly Gln Asn Val Ser Met Phe Cys Ser His Lys Asn
 65 70 75 80
 Lys Ser Leu Gln Ile Thr Tyr Ser Leu Phe Arg Arg Lys Thr His Leu
 85 90 95
 Gly Thr Gln Asp Gly Lys Gly Glu Pro Ala Ile Phe Asn Leu Ser Ile
 100 105 110
 Thr Glu Ala His Glu Ser Gly Pro Tyr Lys Cys Lys Ala Gln Val Thr
 115 120 125
 Ser Cys Ser Lys Tyr Ser Arg Asp Phe Ser Phe Thr Ile Val Asp
 130 135 140

<210> 2563
 <211> 267
 <212> DNA
 <213> Homo sapiens

<400> 2563

ggatcccaga cgagtgttg cagcagtatg ggggccgtgg gggcgacggc caccgtcagc
 60
 accccgggtca ccatccagaa catgacctcc tcttatgtca ccatcacatc ccatgtcctt
 120
 aaggcccttta ccttttggga acaggcagag gccctcaca ggaagaacaa agaattcttt
 180
 gctcagctca gcacaaaagt gcgcgtgttg gccctcaaca gcagcctggt ggacctgggtg
 240
 cactacacaa ggcagggcct ccagcgg
 267

<210> 2564

<211> 89

<212> PRT

<213> Homo sapiens

<400> 2564

Gly	Ser	Gln	Thr	Ser	Ala	Gly	Ser	Ser	Met	Gly	Ala	Val	Gly	Ala	Thr
1				5					10				15		
Ala	Thr	Val	Ser	Thr	Pro	Val	Thr	Ile	Gln	Asn	Met	Thr	Ser	Ser	Tyr
			20				25					30			
Val	Thr	Ile	Thr	Ser	His	Val	Leu	Lys	Ala	Phe	Thr	Leu	Trp	Glu	Gln
		35				40					45				
Ala	Glu	Ala	Leu	Thr	Arg	Lys	Asn	Lys	Glu	Phe	Phe	Ala	Gln	Leu	Ser
	50				55					60					
Thr	Lys	Val	Arg	Val	Leu	Ala	Leu	Asn	Ser	Ser	Leu	Val	Asp	Leu	Val
65				70				75					80		
His	Tyr	Thr	Arg	Gln	Gly	Leu	Gln	Arg							
				85											

<210> 2565

<211> 333

<212> DNA

<213> Homo sapiens

<400> 2565

cttcgcactg ctccgcgagt tcttggggga gtgagcacag cgcgtaagct cagccacgtg
 60
 tgggttcgaat tcgattcctt ggtcaatgcc cgtgacgtgg gcggaatccc ccccccgat
 120
 gggcccggtga aatcccagcg actgatccgc agcgacaacc tgcaggccct caccgaggcc
 180
 gacatcgccc agttgcagca actcgggtgc tccgatgtgg tcgatctgcg ttccacctat
 240
 gaggtggcca gcgagggccc ggggccgctg accgggctg gggtgaccat ccacccccat
 300
 tccttctgc cgcaccagca cgccaatgtg cac
 333

<210> 2566

<211> 111

<212> PRT

<213> Homo sapiens

<400> 2566

```

Leu Arg Thr Ala Pro Arg Val Leu Gly Gly Val Ser Thr Ala Arg Lys
 1           5           10           15
Leu Ser His Val Trp Phe Glu Phe Asp Ser Leu Val Asn Ala Arg Asp
           20           25           30
Val Gly Gly Ile Pro Thr Pro Asp Gly Pro Val Lys Ser Gln Arg Leu
           35           40           45
Ile Arg Ser Asp Asn Leu Gln Ala Leu Thr Glu Ala Asp Ile Ala Gln
           50           55           60
Leu Gln Gln Leu Gly Val Ser Asp Val Val Asp Leu Arg Ser Thr Tyr
           65           70           75           80
Glu Val Ala Ser Glu Gly Pro Gly Pro Leu Thr Gly Arg Gly Val Thr
           85           90           95
Ile His Pro His Ser Phe Leu Pro Asp Gln His Ala Asn Val His
           100           105           110

```

<210> 2567

<211> 396

<212> DNA

<213> Homo sapiens

<400> 2567

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ngaattcaaa ctggtgttcg tatgggccat aagcaaggta catatacgat gcgttttaga
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agccagtcca cagatcaacg tctattcgga accgatcaat ttagtattgg tggggcgtat
120
tctgtacgag gtttttagtgg agaagaaacc ttaagagggtg actcggggcta ttatgtacaa
180
aatgaatggg cattaccatt tagaaaaaaa caaattactc catatgtagg gatagatatt
240
ggacatgtat gggggccatc tacagaaact caattaggta ataccttaat tgggtggtgta
300
gttggtgtac gtggtatggt tgggtgacgat gtaaaactatg atgtatcact aggaacacca
360
attaagaaac cagaaggttt tgatacagat acgcgt
396

```

<210> 2568

<211> 132

<212> PRT

<213> Homo sapiens

<400> 2568

```

Xaa Ile Gln Thr Gly Val Arg Met Gly His Lys Gln Gly Thr Tyr Thr
 1           5           10           15
Met Arg Phe Arg Ser Gln Phe Thr Asp Gln Arg Leu Phe Gly Thr Asp
           20           25           30
Gln Phe Ser Ile Gly Gly Arg Tyr Ser Val Arg Gly Phe Ser Gly Glu
           35           40           45
Glu Thr Leu Arg Gly Asp Ser Gly Tyr Tyr Val Gln Asn Glu Trp Ala
           50           55           60
Leu Pro Phe Arg Lys Gln Gln Ile Thr Pro Tyr Val Gly Ile Asp Ile

```

```

65              70              75              80
Gly His Val Trp Gly Pro Ser Thr Glu Thr Gln Leu Gly Asn Thr Leu
      85              90              95
Ile Gly Gly Val Val Gly Val Arg Gly Met Val Gly Asp Asp Val Asn
      100              105              110
Tyr Asp Val Ser Leu Gly Thr Pro Ile Lys Lys Pro Glu Gly Phe Asp
      115              120              125
Thr Asp Thr Arg
      130

<210> 2569
<211> 330
<212> DNA
<213> Homo sapiens

<400> 2569
cttgcgtcgtg gtgcgtgatgt gtccatgatt ggccagttcg gcgtcggttt ctactctgcc
60
taccctgcgtg ccgatagagt tgctgtgacc accaagcaca acgatgacga gcagtagctg
120
tgggagtgccc aagcggggcgg gtcgttcact gttactcgtg acacgtcagg ggagcagctt
180
ggcaggggcca ctaagatcac actgttcctc aaggacgacg agctggagta ccttgaggag
240
cgtcgcctca aggatctggt caagaagcac tctgagttca tcagctaccc catctccctg
300
tggactgaaa agacaacaga gaaggaaatt
330

<210> 2570
<211> 110
<212> PRT
<213> Homo sapiens

<400> 2570
Leu Ala Ala Gly Ala Asp Val Ser Met Ile Gly Gln Phe Gly Val Gly
1      5      10      15
Phe Tyr Ser Ala Tyr Leu Val Ala Asp Arg Val Val Val Thr Thr Lys
      20      25      30
His Asn Asp Asp Glu Gln Tyr Val Trp Glu Ser Gln Ala Gly Gly Ser
      35      40      45
Phe Thr Val Thr Arg Asp Thr Ser Gly Glu Gln Leu Gly Arg Gly Thr
      50      55      60
Lys Ile Thr Leu Phe Leu Lys Asp Asp Gln Leu Glu Tyr Leu Glu Glu
65      70      75      80
Arg Arg Leu Lys Asp Leu Val Lys Lys His Ser Glu Phe Ile Ser Tyr
      85      90      95
Pro Ile Ser Leu Trp Thr Glu Lys Thr Thr Glu Lys Glu Ile
      100      105      110

<210> 2571
<211> 335
<212> DNA
<213> Homo sapiens

```

<400> 2571
 gaattcgcca atgtttttctc cggtatgggc tccacagtaa ccttatccgg cgcgtccccc
 60
 gtgctcctta aacatctcga taatgaacta tctgagctct ttactgagat cgcctcggag
 120
 aaatgggatg tccgttttagg gcaggggaacg acagctatcg accaggtgga gaagcagcgt
 180
 gaagatgggt cttcctactt cgaaccacc attacattg aagacggcag cactgttacc
 240
 ggtgacgcat tcctagtgtc taccggacgt acccctaaca cgcaccgcct tggcctcgac
 300
 aatggttccg gtgtgaaggt tgaaagggga cgcgt
 335

<210> 2572
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 2572
 Glu Phe Ala Asn Val Phe Ser Gly Met Gly Ser Thr Val Thr Leu Ile
 1 5 10 15
 Gly Arg Ser Pro Val Leu Leu Lys His Leu Asp Asn Glu Leu Ser Glu
 20 25 30
 Leu Phe Thr Glu Ile Ala Arg Glu Lys Trp Asp Val Arg Leu Gly Gln
 35 40 45
 Gly Thr Thr Ala Ile Asp Gln Val Glu Lys Gln Arg Glu Asp Gly Ser
 50 55 60
 Ser Tyr Phe Glu Thr Thr Ile Thr Phe Glu Asp Gly Ser Thr Val Thr
 65 70 75 80
 Gly Asp Ala Phe Leu Val Ala Thr Gly Arg Thr Pro Asn Thr Asp Arg
 85 90 95
 Leu Gly Leu Asp Asn Gly Ser Gly Val Lys Val Glu Arg Gly Arg
 100 105 110

<210> 2573
 <211> 460
 <212> DNA
 <213> Homo sapiens

<400> 2573
 gtcgacaagt accggggcat tgtggttatg gggacggtag atctggggccg tctcgtcagg
 60
 gccggatcca taccggaccg ttctcgtcagg gtggtcggac atcgacgaca ccgcatgatg
 120
 cgagacgacg ttgatacgtc caccggcgcg gtccgtgatc cagcccgctg tcgccgttgc
 180
 cgccactggc acgatgaggg ccatcaccga gaagagaacg gccaccactc gcagaccacc
 240
 tcgtcccaga agagcgagga cgaaggcgat gacggcgatg accagagccg gtacagccaa
 300
 cgatcccacc agaacggagg agatgaaggt gagggcattg tgtgagggga ggatcgcggc
 360

cactgaccac gccagtaccg gcagggtcag gatcagcccg acgagaccgg aagtgatgcg
 420
 tagccaggaa tgacgggagg ttttcgtgct agccacgcgt
 460

<210> 2574
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 2574
 Met Gly Thr Val Asp Leu Gly Arg Leu Val Arg Ala Gly Ser Ile Pro
 1 5 10 15
 Asp Arg Phe Val Arg Val Val Gly His Arg Arg His Arg Arg Cys Arg
 20 25 30
 Asp Asp Val Asp Thr Ser Thr Gly Ala Val Arg Asp Pro Arg Arg Arg
 35 40 45
 Arg Arg Cys Arg His Trp His Asp Glu Gly His His Arg Glu Glu Asn
 50 55 60
 Gly His His Ser Gln Thr Thr Ser Ser Gln Lys Ser Glu Asp Glu Gly
 65 70 75 80
 Asp Asp Gly Asp Asp Gln Ser Arg Tyr Ser Gln Arg Ser His Gln Asn
 85 90 95
 Gly Gly Asp Glu Gly Glu Gly Ile Val
 100 105

<210> 2575
 <211> 3954
 <212> DNA
 <213> Homo sapiens

<400> 2575
 nngacagggg ggaaggagg ggagccagca gggaggagga ggccagggcc cgccccacag
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 ccactctcgc gcctccgaac agccacaggg gcaaagccct gtcaccccca ggatccggct
 120
 atcaggggaaa gaggacaggg agaccagaag agggccagct gggacgaggg ggcggacgcc
 180
 caggaggcaa cttctgagac gcagctcctg agaggggagc ggaccaggcg cgggaggcca
 240
 gaggggggcac agagaacaaa cccctcaga agtgaagagg agagcggaag gaaccgagag
 300
 gggacggaca ggagctgagg aggaagagg aggggagagg ggtcaggcca ggcagccaag
 360
 gagaagacgt gtggccgggg gctatcagaa ggaaactggg acggacgggc cgggctcggg
 420
 ctgtcctgtg gaggcagcgc atccccgggg ccggcagagg cgccagtggc tgggcgggat
 480
 gagtctctga gggccactgt ggagcgcccc gccatggccc cccgcaccct ctggagctgc
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 agcctctaca caggttccag tggggccctc agccccgggg ggccccaggc ccagattggc
 660

ccccggccag ccagccgcca caggaaactgg tgtgcctacy tggtgaccgg gacagtggag
720
tgtgtccttg aggatggagt ggagacatat gtcaagtacc agccttgtgc ctggggccag
780
ccccagtgtc cccaagcat catgtaccgc cgcttctctc gccctcgcta ccgtgtggcc
840
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900
gctgagagtc ccgtccagc gctggggcct gcgtcttcca caccacggcc cctggccggg
960
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1020
gaaggtcctg gggagtgcaga gaaggtgcag cagctggagg aacaggtgca gagcctgacc
1080
aaggagctgc aaggcctgcg gggcgctcctg caaggactga gcgggcgcct ggagaggagt
1140
gtgcagaggg ctgtggagac ggccttcaac gggaggcagc agccagctga cgcggtgctc
1200
cgccctgggg tgcatgaaac cctcaatgag atccagcacc agctgcagct cctggacacc
1260
cgcgcttcca cccacgacca gggagctgggt cacctcaaca accatcatgg cggcagcagc
1320
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1380
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gatgtcgttg ccggctcagt gacagtgcgt agtggggggc gaggcacaga gctgggagga
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1800
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1860
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1920
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1980
gactctcaag tcagcgagat cctcagtgcc ttggagcgca ggggtgctgga cagtgagggg
2040
cagctgcggc tgggtggctc cggcctgcac acggtggaag cagcggggga ggccccggag
2100
gccacgctgg agggattaca agaggttgtg ggccggctcc aggatcgtgt ggatgccacg
2160
gatgagacag ctgcagagtt cacactacgg ctgaatctca ctgcggcccc gctaggccaa
2220
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2280

gaggaactag gccgccttcg ggaatggtgtg gagcgctgct cctgccccct gttgcctcct
2340
cggggtcctg gggctgtgcc aggtgttggg ggcccaagcc gtgggccccct ggacggcttc
2400
agcgtgtttg ggggcagctc aggcctcagcc ctgcaggccc tgcaaggaga gctctctgag
2460
gttattctca gcttcagctc cctcaatgac tcaactgaatg agctccagac cactgtggag
2520
ggccaggggc ctgatctggc tgacctgggg gcaaccaagg accgtatcat ttctgagatt
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2640
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2700
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2760
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2820
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2880
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2940
aaggacctca ctgggcctgc aggagaggct gggccccag ggcctcctgg gctgcaggga
3000
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3060
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3120
caagtggcat tttagctgc tctgagtttg ccccggtctg aaccaggcac ggtccccctc
3180
gacagagtc tgctcaatga tggaggctat tatgatccag agacaggcgt gttcacagcg
3240
ccactggctg gacgctactt gctgagcgcg gtgctgactg ggcaccggca cgagaaagtg
3300
gaggccctgc tgtcccgctc caaccagggc gtggcccgcg tagactccgg tggtctagag
3360
cctgaggggc tggagaataa gccggtggcc gagagccagc ccagcccggg caccctgggc
3420
gtcttcagcc tcatcctgcc gctgcaggcc ggggacacgg tctgcgtcga cctggctatg
3480
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3540
gacccagagc ttgaacacgc gtagactggg gtcccgcccg acgtgtctac gtgggtgaa
3600
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3660
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<210> 2576

<211> 1016

<212> PRT

<213> Homo sapiens

<400> 2576

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Thr Gly Ser Ser Gly Ala Leu Ser Pro Gly Gly Pro Gln Ala Gln Ile
 35              40              45
Ala Pro Arg Pro Ala Ser Arg His Arg Asn Trp Cys Ala Tyr Val Val
 50              55              60
Thr Arg Thr Val Ser Cys Val Leu Glu Asp Gly Val Glu Thr Tyr Val
 65              70              75              80
Lys Tyr Gln Pro Cys Ala Trp Gly Gln Pro Gln Cys Pro Gln Ser Ile
 85              90              95
Met Tyr Arg Arg Phe Leu Arg Pro Arg Tyr Arg Val Ala Tyr Lys Thr
100              105              110
Val Thr Asp Met Glu Trp Arg Cys Cys Gln Gly Tyr Gly Gly Asp Asp
115              120              125
Cys Ala Glu Ser Pro Ala Pro Ala Leu Gly Pro Ala Ser Ser Thr Pro
130              135              140
Arg Pro Leu Ala Arg Pro Ala Arg Pro Asn Leu Ser Gly Ser Ser Ala
145              150              155              160
Gly Ser Pro Leu Ser Gly Leu Gly Gly Glu Gly Pro Gly Glu Ser Glu
165              170              175
Lys Val Gln Gln Leu Glu Glu Gln Val Gln Ser Leu Thr Lys Glu Leu
180              185              190
Gln Gly Leu Arg Gly Val Leu Gln Gly Leu Ser Gly Arg Leu Ala Glu
195              200              205
Asp Val Gln Arg Ala Val Glu Thr Ala Phe Asn Gly Arg Gln Gln Pro
210              215              220
Ala Asp Ala Ala Ala Arg Pro Gly Val His Glu Thr Leu Asn Glu Ile
225              230              235              240
Gln His Gln Leu Gln Leu Leu Asp Thr Arg Val Ser Thr His Asp Gln
245              250              255
Glu Leu Gly His Leu Asn Asn His His Gly Gly Ser Ser Ser Ser Gly
260              265              270
Gly Ser Arg Ala Pro Ala Pro Ala Ser Ala Pro Pro Gly Pro Ser Glu
275              280              285
Glu Leu Leu Arg Gln Leu Glu Gln Arg Leu Gln Glu Ser Cys Ser Val
290              295              300
Cys Leu Ala Gly Leu Asp Gly Phe Arg Arg Gln Gln Gln Glu Asp Arg
305              310              315              320
Glu Arg Leu Arg Ala Met Glu Lys Leu Leu Ala Ser Val Glu Glu Arg
325              330              335
Gln Arg His Leu Ala Gly Leu Ala Val Gly Arg Arg Pro Pro Gln Glu
340              345              350
Cys Cys Ser Pro Glu Leu Gly Arg Arg Leu Ala Glu Leu Glu Arg Arg

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Leu	Val	Gly	Ser	Gly	Leu	His	Thr	Val	Glu	Ala	Ala	Gly	Glu	Ala	Arg
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Asn	Leu	Thr	Ala	Ala	Arg	Leu	Gly	Gln	Leu	Glu	Gly	Leu	Leu	Gln	Ala
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His	Gly	Asp	Glu	Gly	Cys	Gly	Ala	Cys	Gly	Gly	Val	Gln	Glu	Glu	Leu
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Pro	Arg	Gly	Pro	Gly	Ala	Gly	Pro	Gly	Val	Gly	Gly	Pro	Ser	Arg	Gly
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625					630				635					640	
Gln	Ala	Leu	Gln	Gly	Glu	Leu	Ser	Glu	Val	Ile	Leu	Ser	Phe	Ser	Ser
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	660						665						670		
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	675						680				685				
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	690				695					700					
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705					710				715					720	
Pro	Ser	Leu	Glu	Gly	Arg	Leu	Gly	Arg	Leu	Glu	Gly	Val	Cys	Glu	Arg
			725						730					735	
Leu	Asp	Thr	Val	Ala	Gly	Gly	Leu	Gln	Gly	Leu	Arg	Glu	Gly	Leu	Ser
			740					745					750		
Arg	His	Val	Ala	Gly	Leu	Trp	Ala	Gly	Leu	Arg	Glu	Thr	Asn	Thr	Thr
	755					760						765			
Ser	Gln	Met	Gln	Ala	Ala	Leu	Leu	Glu	Lys	Leu	Val	Gly	Gly	Gln	Ala
	770					775					780				
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Gly Glu Ala Gly Pro Pro Gly Pro Pro Gly Leu Gln Gly Pro Pro Gly
      820              825              830
Pro Ala Gly Pro Pro Gly Ser Pro Gly Lys Asp Gly Gln Glu Gly Pro
      835              840              845
Ile Gly Pro Pro Gly Pro Gln Gly Glu Gln Gly Val Glu Gly Ala Pro
      850              855              860
Ala Ala Pro Val Pro Gln Val Ala Phe Ser Ala Ala Leu Ser Leu Pro
865              870              875              880
Arg Ser Glu Pro Gly Thr Val Pro Phe Asp Arg Val Leu Leu Asn Asp
      885              890              895
Gly Gly Tyr Tyr Asp Pro Glu Thr Gly Val Phe Thr Ala Pro Leu Ala
      900              905              910
Gly Arg Tyr Leu Leu Ser Ala Val Leu Thr Gly His Arg His Glu Lys
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Val Glu Ala Val Leu Ser Arg Ser Asn Gln Gly Val Ala Arg Val Asp
      930              935              940
Ser Gly Gly Tyr Glu Pro Glu Gly Leu Glu Asn Lys Pro Val Ala Glu
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Ser Gln Pro Ser Pro Gly Thr Leu Gly Val Phe Ser Leu Ile Leu Pro
      965              970              975
Leu Gln Ala Gly Asp Thr Val Cys Val Asp Leu Val Met Gly Gln Leu
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<210> 2577

<211> 343

<212> DNA

<213> Homo sapiens

<400> 2577

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<210> 2578

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2578

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Met Ala Ser Trp Ala Ser Arg Arg Ser Trp Gly Trp Gly Gly Gly Val
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Val His Ser Ser Pro Ala Ala Ala Asp Leu Glu Pro Ser Val Ala Lys
          20           25           30
Cys Leu Leu Ser Lys Leu Arg Gly Ser Thr Gly Ala Gly Gln Thr Leu
          35           40           45
Leu Pro Pro Ala Gly Gln Cys Ser Leu Gly Tyr Arg Ala Leu Ser Pro
          50           55           60
Thr Val Thr Pro Glu Trp Ile Pro Ala Leu Pro Ala Leu Gly Ser Gln
          65           70           75           80
Trp Gly Leu Gly Ala Ser Gln Gly Gln His Glu Pro Leu Ala Arg Val
          85           90           95
Ser Asn Arg Pro
          100

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<210> 2579

<211> 420

<212> DNA

<213> Homo sapiens

<400> 2579

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120
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180
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240
accataacct ctgggtagt gatttttatt ctgccacatta acagtgtttt gaaccaatt
300
ctctatactc tgaccacaag accattttaa gaaatgattc atcggttttg gtataactac
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420

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<210> 2580

<211> 140

<212> PRT

<213> Homo sapiens

<400> 2580

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Val Phe Ser Tyr Gly Ser Met Phe Tyr Ser Val His Gln Ser Ala Ile
          20           25           30
Thr Ala Thr Glu Ile Arg Asn Gln Val Lys Lys Glu Met Ile Leu Ala
          35           40           45
Lys Arg Phe Phe Phe Ile Val Phe Thr Asp Ala Leu Cys Trp Ile Pro
          50           55           60
Ile Phe Val Val Lys Phe Leu Ser Leu Leu Gln Val Glu Ile Pro Gly
          65           70           75           80
Thr Ile Thr Ser Trp Val Val Ile Phe Ile Leu Pro Ile Asn Ser Ala

```

```

      85              90              95
Leu Asn Pro Ile Leu Tyr Thr Leu Thr Thr Arg Pro Phe Lys Glu Met
      100              105              110
Ile His Arg Phe Trp Tyr Asn Tyr Arg Gln Arg Lys Ser Met Asp Ser
      115              120              125
Lys Gly Gln Lys Thr Glu Ala Gly Val Cys Ser Arg
      130              135              140

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<210> 2581
 <211> 459
 <212> DNA
 <213> Homo sapiens

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<400> 2581
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120
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180
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240
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300
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360
accgatgtcg ctgccctggg cattgacgtc accggggtgt ccacgtcat caaccatgaa
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459

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<210> 2582
 <211> 153
 <212> PRT
 <213> Homo sapiens

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<400> 2582
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      20      25      30
Gln Thr Thr Val Pro Asp Thr Gln Gln Phe Val Tyr Gln Ala His Ser
      35      40      45
Leu Asp Lys Ile Glu Ile Ile Gly Arg Ile Leu Gln Ala Asn Asp Val
      50      55      60
Glu Lys Val Ile Ile Phe Cys Arg Thr Lys Arg Ala Cys Gln Arg Leu
      65      70      75      80
Ser Asp Asp Leu Asp Arg Arg Gly Phe Lys Thr Arg Ala Ile His Gly
      85      90      95
Asp Leu Thr Gln Val Ala Arg Glu Lys Ala Leu Lys Lys Phe Arg His
      100      105      110
Gly Glu Ala Thr Ile Leu Val Ala Thr Asp Val Ala Ala Arg Gly Ile
      115      120      125
Asp Val Thr Gly Val Ser His Val Ile Asn His Glu Cys Pro Glu Asp

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130
Glu Lys Thr Tyr Val His Arg Ile Gly
145

135
150

140

<210> 2583
<211> 7098
<212> DNA
<213> Homo sapiens

<400> 2583
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180
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5880
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5940
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6000
gtcattgtcc ccacaatgtg ccagtcgact atttgcactt accttgcctt atatatccgt
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acggaggtgt gcaattcttc gtgtcagtag ccttgtgaca ctgaacctgg atggattata
6120
gaggagccct cacggctgat caataatgtt gcaaaggag actacagggg tctcacgacg
6180

aatattctga tacaatactc aacctcggtatataatg tgtataaata tatgtatatc
 6240
 ccagcggcac ttatactgt tcactgtaca aaagcttaca gttttccaca aggactttaa
 6300
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 6360
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 6420
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 6480
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 6540
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 6600
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 6660
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 6720
 gtgtcacata ttagaatgct gaccttcat atggattatt gtgagtcac agagtttatt
 6780
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 6840
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 6900
 acacggcatg gggttggtga cactttaatt ttgtataaa tgggtggaat cacaagttgc
 6960
 tgtgatactt catttttaaa ttgtgaactt tgtacaaatt ttgtcatgct ggatgttaac
 7020
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 7080
 aaaaaaaaaa aaaaaaaaaa
 7098

<210> 2584

<211> 1186

<212> PRT

<213> Homo sapiens

<400> 2584

Met	Glu	Val	Asp	Thr	Glu	Glu	Lys	Arg	His	Arg	Thr	Arg	Ser	Lys	Gly
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Val	Arg	Val	Pro	Val	Glu	Pro	Ala	Ile	Gln	Glu	Leu	Phe	Ser	Cys	Pro
			20					25					30		
Thr	Pro	Gly	Cys	Asp	Gly	Ser	Gly	His	Val	Ser	Gly	Lys	Tyr	Ala	Arg
		35				40					45				
His	Arg	Ser	Val	Tyr	Gly	Cys	Pro	Leu	Ala	Lys	Lys	Arg	Lys	Thr	Gln
	50				55						60				
Asp	Lys	Gln	Pro	Gln	Glu	Pro	Ala	Pro	Lys	Arg	Lys	Pro	Phe	Ala	Val
	65				70				75					80	
Lys	Ala	Asp	Ser	Ser	Ser	Val	Asp	Glu	Cys	Asp	Asp	Ser	Asp	Gly	Thr
		85						90					95		
Glu	Asp	Met	Asp	Glu	Lys	Glu	Glu	Glu	Gly	Glu	Glu	Tyr	Ser	Glu	
		100					105					110			
Asp	Asn	Asp	Glu	Pro	Gly	Asp	Glu	Asp	Glu	Glu	Asp	Glu	Glu	Gly	Asp

```

115          120          125
Arg Glu Gly Glu Glu Glu Ile Glu Glu Glu Asp Glu Asp Asp Asp Glu
130          135          140
Asp Gly Glu Asp Val Glu Asp Glu Glu Glu Glu Glu Glu Glu
145          150          155          160
Glu Glu Glu Glu Glu Glu Asn Glu Asp His Gln Met Asn Cys His
165          170          175
Asn Thr Arg Ile Met Gln Asp Thr Glu Lys Asp Asp Asn Asn Ser Asp
180          185          190
Glu Tyr Asp Asn Tyr Asp Glu Leu Val Ala Lys Ser Leu Leu Asn Leu
195          200          205
Gly Lys Ile Ala Glu Asp Ala Ala Tyr Arg Ala Arg Thr Glu Ser Glu
210          215          220
Met Asn Ser Asn Thr Ser Asn Ser Leu Glu Asp Asp Ser Asp Lys Asn
225          230          235          240
Glu Asn Leu Gly Arg Lys Ser Glu Leu Ser Leu Asp Leu Asp Ser Asp
245          250          255
Val Val Arg Glu Thr Val Asp Ser Leu Lys Leu Leu Ala Gln Gly His
260          265          270
Gly Val Val Leu Ser Glu Asn Met Asn Asp Arg Asn Tyr Ala Asp Ser
275          280          285
Met Ser Gln Gln Asp Ser Arg Asn Met Asn Tyr Val Met Leu Gly Lys
290          295          300
Pro Met Asn Asn Gly Leu Met Glu Lys Met Val Glu Glu Ser Asp Glu
305          310          315          320
Glu Val Cys Leu Ser Ser Leu Glu Cys Leu Arg Asn Gln Cys Phe Asp
325          330          335
Leu Ala Arg Lys Leu Ser Glu Thr Asn Pro Gln Glu Arg Asn Pro Gln
340          345          350
Gln Asn Met Asn Ile Arg Gln His Val Arg Pro Glu Glu Asp Phe Pro
355          360          365
Gly Arg Thr Pro Asp Arg Asn Tyr Ser Asp Met Leu Asn Leu Met Arg
370          375          380
Leu Glu Glu Gln Leu Ser Pro Arg Ser Arg Val Phe Ala Ser Cys Ala
385          390          395          400
Lys Glu Asp Gly Cys His Glu Arg Asp Asp Asp Thr Thr Ser Val Asn
405          410          415
Ser Asp Arg Ser Glu Glu Val Phe Asp Met Thr Lys Gly Asn Leu Thr
420          425          430
Leu Leu Glu Lys Ala Ile Ala Leu Glu Thr Glu Arg Ala Lys Ala Met
435          440          445
Arg Glu Lys Met Ala Met Glu Ala Gly Arg Arg Asp Asn Met Arg Ser
450          455          460
Tyr Glu Asp Gln Ser Pro Arg Gln Leu Pro Gly Glu Asp Arg Lys Pro
465          470          475          480
Lys Ser Ser Asp Ser His Val Lys Lys Pro Tyr Tyr Gly Lys Asp Pro
485          490          495
Ser Arg Thr Glu Lys Lys Glu Ser Lys Cys Pro Thr Pro Gly Cys Asp
500          505          510
Gly Thr Gly His Val Thr Gly Leu Tyr Pro His His Arg Ser Leu Ser
515          520          525
Gly Cys Pro His Lys Asp Arg Val Pro Pro Glu Ile Leu Ala Met His
530          535          540
Glu Ser Val Leu Lys Cys Pro Thr Pro Gly Cys Thr Gly Arg Gly His

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545                550                555                560
Val Asn Ser Asn Arg Asn Ser His Arg Ser Leu Ser Gly Cys Pro Ile
565                570                575
Ala Ala Ala Glu Lys Leu Ala Lys Ala Gln Glu Lys His Gln Ser Cys
580                585                590
Asp Val Ser Lys Ser Ser Gln Ala Ser Asp Arg Val Leu Arg Pro Met
595                600                605
Cys Phe Val Lys Gln Leu Glu Ile Pro Gln Tyr Gly Tyr Arg Asn Asn
610                615                620
Val Pro Thr Thr Thr Pro Arg Ser Asn Leu Ala Lys Glu Leu Glu Lys
625                630                635                640
Tyr Ser Lys Thr Ser Phe Glu Tyr Asn Ser Tyr Asp Asn His Thr Tyr
645                650                655
Gly Lys Arg Ala Ile Ala Pro Lys Val Gln Thr Arg Asp Ile Ser Pro
660                665                670
Lys Gly Tyr Asp Asp Ala Lys Arg Tyr Cys Lys Asp Pro Ser Pro Ser
675                680                685
Ser Ser Ser Thr Ser Ser Tyr Ala Pro Ser Ser Ser Ser Asn Leu Ser
690                695                700
Cys Gly Gly Gly Ser Ser Ala Ser Ser Thr Cys Ser Lys Ser Ser Phe
705                710                715                720
Asp Tyr Thr His Asp Met Glu Ala Ala His Met Ala Ala Thr Ala Ile
725                730                735
Leu Asn Leu Ser Thr Arg Cys Arg Glu Met Pro Gln Asn Leu Ser Thr
740                745                750
Lys Pro Gln Asp Leu Cys Ala Thr Arg Asn Pro Asp Met Glu Val Asp
755                760                765
Glu Asn Gly Thr Leu Asp Leu Ser Met Asn Lys Gln Arg Pro Arg Asp
770                775                780
Ser Cys Cys Pro Ile Leu Thr Pro Leu Glu Pro Met Ser Pro Gln Gln
785                790                795                800
Gln Ala Val Met Asn Asn Arg Cys Phe Gln Leu Gly Glu Gly Asp Cys
805                810                815
Trp Asp Leu Pro Val Asp Tyr Thr Lys Met Lys Pro Arg Arg Ile Asp
820                825                830
Glu Asp Glu Ser Lys Asp Ile Thr Pro Glu Asp Leu Asp Pro Phe Gln
835                840                845
Glu Ala Leu Glu Glu Arg Arg Tyr Pro Gly Glu Val Thr Ile Pro Ser
850                855                860
Pro Lys Pro Lys Tyr Pro Gln Cys Lys Glu Ser Lys Lys Asp Leu Ile
865                870                875                880
Thr Leu Ser Gly Cys Pro Leu Ala Asp Lys Ser Ile Arg Ser Met Leu
885                890                895
Ala Thr Ser Ser Gln Glu Leu Lys Cys Pro Thr Pro Gly Cys Asp Gly
900                905                910
Ser Gly His Ile Thr Gly Asn Tyr Ala Ser His Arg Ser Leu Ser Gly
915                920                925
Cys Pro Arg Ala Lys Lys Ser Gly Ile Arg Ile Ala Gln Ser Lys Glu
930                935                940
Asp Lys Glu Asp Gln Glu Pro Ile Arg Cys Pro Val Pro Gly Cys Asp
945                950                955                960
Gly Gln Gly His Ile Thr Gly Lys Tyr Ala Ser His Arg Ser Ala Ser
965                970                975
Gly Cys Pro Leu Ala Ala Lys Arg Gln Lys Asp Gly Tyr Leu Asn Gly

```

980 985 990
 Ser Gln Phe Ser Trp Lys Ser Val Lys Thr Glu Gly Met Ser Cys Pro
 995 1000 1005
 Thr Pro Gly Cys Asp Gly Ser Gly His Val Ser Gly Ser Phe Leu Thr
 1010 1015 1020
 His Arg Ser Leu Ser Gly Cys Pro Arg Ala Thr Ser Ala Met Lys Lys
 1025 1030 1035 1040
 Ala Lys Leu Ser Gly Glu Gln Met Leu Thr Ile Lys Gln Arg Ala Ser
 1045 1050 1055
 Asn Gly Ile Glu Asn Asp Glu Glu Ile Lys Gln Leu Asp Glu Glu Ile
 1060 1065 1070
 Lys Glu Leu Asn Glu Ser Asn Ser Gln Met Glu Ala Asp Met Ile Lys
 1075 1080 1085
 Leu Arg Thr Gln Ile Thr Thr Met Glu Ser Asn Leu Lys Thr Ile Glu
 1090 1095 1100
 Glu Glu Asn Lys Val Ile Glu Gln Gln Asn Glu Ser Leu Leu His Glu
 1105 1110 1115 1120
 Leu Ala Asn Leu Ser Gln Ser Leu Ile His Ser Leu Ala Asn Ile Gln
 1125 1130 1135
 Leu Pro His Met Asp Pro Ile Asn Glu Gln Asn Phe Asp Ala Tyr Val
 1140 1145 1150
 Thr Thr Leu Thr Glu Met Tyr Thr Asn Gln Asp Arg Tyr Gln Ser Pro
 1155 1160 1165
 Glu Asn Lys Ala Leu Leu Glu Asn Ile Lys Gln Ala Val Arg Gly Ile
 1170 1175 1180
 Gln Val
 1185

<210> 2585

<211> 542

<212> DNA

<213> Homo sapiens

<400> 2585

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 60
 ccaagagccc agggatcgcc tcgctgacag accccaaaac acggggccacg ccaccgccgc
 120
 ctctaggtac ctgtgcccc agtctcaagc atcactccgt gtctccctca catgccttct
 180
 gggcctctag cccctcaaaga gctaaagtat gtgagcactt tctcagccct ttaaacggat
 240
 taagtcattg catctcaca aggctgctgt gttttattac ctctgtttca ggtgcaagtc
 300
 atccccggga ggagtggtgg ggaatgccgc tgaccctggg ccactggct gcagcatctg
 360
 tggtgatgac caccctctg cctcaggctt tgctcctgaa tgttcttctg ctctaggtct
 420
 gtccgctcct ggccctgctc ttcttaactc cggtcaagcc ccttgggtca cagtcctatg
 480
 ctcatcactt caatgacgcg gatgctggcg atccccaaat ctctaatatc aagtgcagat
 540
 ct
 542

<210> 2586
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 2586
 Met Pro Ser Pro Ala Lys Ser Pro Gly Ile Ala Ser Leu Thr Asp Pro
 1 5 10 15
 Lys Thr Arg Ala Thr Pro Pro Arg Pro Leu Gly Thr Cys Ala Pro Ser
 20 25 30
 Leu Lys His His Ser Val Ser Pro Ser His Ala Phe Trp Ala Ser Ser
 35 40 45
 Pro Gln Arg Ala Lys Val Cys Glu His Phe Leu Ser Pro Leu Asn Gly
 50 55 60
 Leu Ser His Val Ile Leu Thr Arg Leu Leu Cys Phe Ile Thr Ser Val
 65 70 75 80
 Ser Gly Ala Ser His Pro Arg Glu Glu Trp Trp Gly Cys Arg Leu Thr
 85 90 95
 Leu Gly His Leu Ala Ala Ala Ser Val Leu Met Thr Thr Leu Leu Pro
 100 105 110
 Gln Ala Leu Leu Leu Asn Val Leu Ala Leu
 115 120

<210> 2587
 <211> 435
 <212> DNA
 <213> Homo sapiens

<400> 2587
 ncgaatatcc atgcagcgat cccggggcgga atgctctcca acatggagtc ccagcttgag
 60
 gccacgggag ctggagaccg catggatgag gtcataagg aggtgccgcg cgttcgtaag
 120
 gatgccggct acccgccgct ggtcaccgcc tcgtcccgca tcgtgggaac ccaggcggtg
 180
 ttcaacgtct tgatgggcaa tggttcgtac aagaatctca ctgccgagtt tgccgacctc
 240
 atgctcggct actacggcaa gccattggc gagctcaatc ctgagatcgt cgagatggcc
 300
 aagaagcaga ccggcaagga gccgatcgac tgccgtcccg ccgacttgct cgagcctgag
 360
 tgggatcagt tggctcgagca ggccaagagt cttgagggct tcgacggctc cgacgaggac
 420
 gttcttacca acgcg
 435

<210> 2588
 <211> 145
 <212> PRT
 <213> Homo sapiens

<400> 2588
 Xaa Asn Ile His Ala Ala Ile Pro Gly Gly Met Leu Ser Asn Met Glu


```

      1           5           10           15
Ser  Gln  Leu  Glu  Ala  Gln  Gly  Ala  Gly  Asp  Arg  Met  Asp  Glu  Val  Met
      20           25           30
Lys  Glu  Val  Pro  Arg  Val  Arg  Lys  Asp  Ala  Gly  Tyr  Pro  Pro  Leu  Val
      35           40           45
Thr  Pro  Ser  Ser  Gln  Ile  Val  Gly  Thr  Gln  Ala  Val  Phe  Asn  Val  Leu
      50           55           60
Met  Gly  Asn  Gly  Ser  Tyr  Lys  Asn  Leu  Thr  Ala  Glu  Phe  Ala  Asp  Leu
      65           70           75           80
Met  Leu  Gly  Tyr  Tyr  Gly  Lys  Pro  Ile  Gly  Glu  Leu  Asn  Pro  Glu  Ile
      85           90           95
Val  Glu  Met  Ala  Lys  Lys  Gln  Thr  Gly  Lys  Glu  Pro  Ile  Asp  Cys  Arg
      100          105          110
Pro  Ala  Asp  Leu  Leu  Glu  Pro  Glu  Trp  Asp  Gln  Leu  Val  Glu  Gln  Ala
      115          120          125
Lys  Ser  Leu  Glu  Gly  Phe  Asp  Gly  Ser  Asp  Glu  Asp  Val  Leu  Thr  Asn
      130          135          140
Ala
145

```

<210> 2589

<211> 366

<212> DNA

<213> Homo sapiens

<400> 2589

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ccggcgaaaga  aggacatggc  catggtcttc  ggcgcgactc  attacgtcga  cccgacggcc
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120
gaggtcgctg  gcatcgctga  ggtcatggag  caggcctact  gggcgggcgg  acgcggcgcg
180
acgatcgctc  acgtcggggc  gctggggcgc  gacgccaagc  tggctcctgc  ggcgaacgac
240
ctgcacggcg  gcgccaagac  gatcatggcg  tgcgccaacg  gattggggcg  agtgcgcacc
300
gactatgcca  agatgatctc  gctggctcga  accggacggc  tggacctggg  cgggatgatc
360
acgcgt
366

```

<210> 2590

<211> 122

<212> PRT

<213> Homo sapiens

<400> 2590

```

Pro  Ala  Lys  Lys  Asp  Met  Ala  Met  Val  Phe  Gly  Ala  Thr  His  Tyr  Val
      1           5           10           15
Asp  Pro  Thr  Ala  Gly  Asp  Pro  Val  Glu  Gln  Ile  Arg  Ala  Leu  Thr  Arg
      20           25           30
Gly  Arg  Gly  Val  Asp  Phe  Ala  Ile  Glu  Val  Val  Gly  Ile  Val  Glu  Val
      35           40           45
Met  Glu  Gln  Ala  Tyr  Trp  Ala  Ala  Arg  Arg  Gly  Gly  Thr  Ile  Val  Tyr

```

```

      50              55              60
Val Gly Ala Leu Gly Ile Asp Ala Lys Leu Val Leu Pro Ala Asn Asp
65              70              75              80
Leu His Gly Gly Ala Lys Thr Ile Ile Gly Cys Ala Asn Gly Leu Gly
      85              90              95
Ala Val Arg Thr Asp Tyr Ala Lys Met Ile Ser Leu Val Glu Thr Gly
      100              105              110
Arg Leu Asp Leu Gly Gly Met Ile Thr Arg
      115              120

```

<210> 2591
 <211> 341
 <212> DNA
 <213> Homo sapiens

```

<400> 2591
acgcgtaaag gcatgacctc accttatcat cagggtcaca cgtgtgttat tctggggctg
60
agcagccac gagttgtcca gcaccaggcc aggggtcagt cagcaatgag gacagctcct
120
tcctgtccta gggcaggccc tgggcagggc aatgctgggg acacgggtggg gagtaggcca
180
cagcttctgt gggggagttc ctatggcagg aggatcatgc ccagcagcgt ggaagacaa
240
ggggtgacc tgcaactcag gctcctggga agacggggag ggttgaggtt acatgagggg
300
gaggggtcag ttggtgcatt cacagaacag caggggtggcc a
341

```

<210> 2592
 <211> 109
 <212> PRT
 <213> Homo sapiens

```

<400> 2592
Met Thr Ser Pro Tyr His Gln Gly His Thr Cys Val Ile Leu Gly Leu
1      5      10      15
Ser Ser Pro Arg Val Val Gln His Gln Ala Arg Gly Gln Ser Ala Met
20      25      30
Arg Thr Ala Pro Ser Cys Ser Arg Ala Gly Pro Gly Gln Gly Asn Ala
35      40      45
Gly Asp Thr Val Gly Ser Arg Pro Gln Leu Leu Trp Gly Ser Ser Tyr
50      55      60
Gly Arg Arg Ile Met Pro Ser Ser Val Glu Glu Gln Gly Val Thr Leu
65      70      75      80
His Ser Arg Leu Leu Gly Arg Arg Gly Gly Leu Arg Leu His Glu Gly
85      90      95
Glu Gly Ser Val Gly Ala Phe Thr Glu Gln Gln Gly Gly
100      105

```

<210> 2593
 <211> 501
 <212> DNA
 <213> Homo sapiens

<400> 2593
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 60
 gcgcctttcat ggggttttat ggaggtggat gaatatgagg cggatgatat tatcggtacc
 120
 ttggcgcgcc aagcggatga agcgggggat tatatgactt atattgtgtc ttcggacctc
 180
 gatatgctgc aaatcgtaga tgaaaacacc aagatgtatc gaattctgcg gggattttcg
 240
 gatctcgagg agatggatac tccagcgatt gaagaaaaat atggaatctt gaagtcgcaa
 300
 tttttggacc tgaaggcgct gaagggggat aattcggata atattccagg cgtaccaggg
 360
 attggtgaga aaaccgcagt gaaactcttg aatgagtatg gtatcttgga ggggatttat
 420
 aatcataatca aggaatttc gggggcgaca cagaagaaat tgattgctgg acgcgaatca
 480
 gctgagatgt ctcttaagct t
 501

<210> 2594
 <211> 167
 <212> PRT
 <213> Homo sapiens

<400> 2594
 Arg Val Arg Pro Pro Glu Asp Phe Tyr Ala Gln Ile Pro Leu Leu Arg
 1 5 10 15
 Glu Leu Ile Ser Ala Leu Ser Trp Gly Phe Met Glu Val Asp Glu Tyr
 20 25 30
 Glu Ala Asp Asp Ile Ile Gly Thr Leu Ala Arg Gln Ala Asp Glu Ala
 35 40 45
 Gly Asp Tyr Met Thr Tyr Ile Val Ser Ser Asp Leu Asp Met Leu Gln
 50 55 60
 Ile Val Asp Glu Asn Thr Lys Met Tyr Arg Ile Leu Arg Gly Phe Ser
 65 70 75 80
 Asp Leu Glu Glu Met Asp Thr Pro Ala Ile Glu Glu Lys Tyr Gly Ile
 85 90 95
 Leu Lys Ser Gln Phe Leu Asp Leu Lys Ala Leu Lys Gly Asp Asn Ser
 100 105 110
 Asp Asn Ile Pro Gly Val Pro Gly Ile Gly Glu Lys Thr Ala Val Lys
 115 120 125
 Leu Leu Asn Glu Tyr Gly Ser Leu Glu Gly Ile Tyr Asn His Ile Lys
 130 135 140
 Glu Ile Ser Gly Ala Thr Gln Lys Lys Leu Ile Ala Gly Arg Glu Ser
 145 150 155 160
 Ala Glu Met Ser Leu Lys Leu
 165

<210> 2595
 <211> 928
 <212> DNA
 <213> Homo sapiens

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<400> 2595
agatcttcca gatgcaacaa tgatcaatta agacacgcgg cgacatgggt gccctgcct
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caccceccag ggatacctgt aatacctgct tcccacttca tgggctacaa tctcatgctg
120
gtcacaaatt ctggggctca ctcatataac accaacaat gggatatttg tgaagaactt
180
cgcttgcggg agcttgaaga agtcaaggcc agagctgctc agatggaaaa gaccatgcgg
240
tgggtggctgg actgcactgc caactggaga gaaaaatgga gtaaagtctg agctgaaagg
300
aacagtgcgc gaaaggaagg aagacaactc agaataaaac tagagatggc gatgaaagaa
360
tcggatccac tgaacagaa acagagtctg ccacttcaga aggaggcatt agaagctaata
420
gttaccaggc atctgaagct tcttggcttc gtagaagaat cctgtgaaca tacagaccaa
480
tttcaattga gttcacaat gcatgagctc atcagagagt atttggtaaa aagacaattt
540
tctacaaagg aggacacaaa taataaggaa caaggtgtgg ttattgattc tctaaaatta
600
agtgaggaga tgaagcccaa tctagatggg gttgatttat tcaacaatgg tggttctgga
660
aacggtgaaa cgaaaactgg gctgagactg aaagcaataa atctgccttt ggaaaatgaa
720
gtaactgaaa tttagctttt gcaggtgcat ttggatgaat tccaaaaaat cttatggaag
780
gaaagagaaa tgcgcacagc tttggaaaaa gaaatagaga gactggagtc ggctttgtct
840
ctgtggaagt ggaagtatga agaactgaaa gaatcaaagc caaaaaatgt gaaagagttt
900
gacattcttc ttggtcaaca taatgatg
928

```

```

<210> 2596
<211> 309
<212> PRT
<213> Homo sapiens

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<400> 2596
Arg Ser Ser Arg Cys Asn Asn Asp Gln Leu Arg His Ala Ala Thr Trp
1      5      10      15
Trp Pro Leu Pro His Pro Pro Gly Ile Pro Val Ile Pro Ala Ser His
20     25     30
Phe Met Gly Tyr Asn Leu Met Leu Val Thr Ile Ser Gly Ala His Ser
35     40     45
Tyr Asn Thr Asn Lys Trp Asp Ile Cys Glu Glu Leu Arg Leu Arg Glu
50     55     60
Leu Glu Glu Val Lys Ala Arg Ala Ala Gln Met Glu Lys Thr Met Arg
65     70     75     80
Trp Trp Ser Asp Cys Thr Ala Asn Trp Arg Glu Lys Trp Ser Lys Val
85     90     95
Arg Ala Glu Arg Asn Ser Ala Gly Lys Glu Gly Arg Gln Leu Arg Ile

```

```

          100              105              110
Lys Leu Glu Met Ala Met Lys Glu Ser Asp Pro Leu Lys Gln Lys Gln
115
Ser Leu Pro Leu Gln Lys Glu Ala Leu Glu Ala Asn Val Thr Gln Asp
130
Leu Lys Leu Pro Gly Phe Val Glu Glu Ser Cys Glu His Thr Asp Gln
145
Phe Gln Leu Ser Ser Gln Met His Glu Ser Ile Arg Glu Tyr Leu Val
165
Lys Arg Gln Phe Ser Thr Lys Glu Asp Thr Asn Asn Lys Glu Gln Gly
180
Val Val Ile Asp Ser Leu Lys Leu Ser Glu Glu Met Lys Pro Asn Leu
195
Asp Gly Val Asp Leu Phe Asn Asn Gly Gly Ser Gly Asn Gly Glu Thr
210
Lys Thr Gly Leu Arg Leu Lys Ala Ile Asn Leu Pro Leu Glu Asn Glu
225
Val Thr Glu Ile Ser Ala Leu Gln Val His Leu Asp Glu Phe Gln Lys
245
Ile Leu Trp Lys Glu Arg Glu Met Arg Thr Ala Leu Glu Lys Glu Ile
260
Glu Arg Leu Glu Ser Ala Leu Ser Leu Trp Lys Trp Lys Tyr Glu Glu
275
Leu Lys Glu Ser Lys Pro Lys Asn Val Lys Glu Phe Asp Ile Leu Leu
290
Gly Gln His Asn Asp
305

```

<210> 2597

<211> 631

<212> DNA

<213> Homo sapiens

<400> 2597

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ccatgggtgg gaatgcaaga gacacactct agacttacta gaggagcaag agcaggactt
60
ggctgcacct gcagctgagg gttagcagga attaggagat aacagtagaa tagggctaga
120
ctgaaaaggc ctttgatgcc aggttaggaa atttaccatt tatccacaaa atccaaatcc
180
tcctttaata atgagatgtc ttacaagtt ttgggcaag agtggtagtg ctgacctggg
240
gtcctgggaa ggaactgtgt ggggatgggt tgccaggactt acctagggtg ggaaggcac
300
aagcagcatg gggctgtggc agctaccaga ggtaaggga catttcaggg aaagacttgg
360
caggacaaga ccttccttgg atggatggat gaataccaga aacagggacc caagagaaa
420
gccgagtttc atagggagag aagatgggtc atgtatgagg catgttgagc ttgtactgat
480
ggtagagcgt ccagtcgaca gtactaccca ctggccagtg agaaatgtgg gaccaggggt
540
caggaggaaa ctggggccgg aaatgagcat ttggaaggcg ccaggggtgga agcgggtggt
600

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tcactccacg agtgctattt cacttacgcg t
631

<210> 2598
<211> 108
<212> PRT
<213> Homo sapiens

<400> 2598
Met Gly Leu Trp Gln Leu Pro Glu Val Lys Gly His Phe Arg Glu Arg
1 5 10 15
Leu Gly Arg Thr Arg Pro Ser Leu Asp Gly Trp Met Asn Thr Arg Asn
20 25 30
Arg Asp Pro Arg Glu Arg Pro Ser Phe Ile Gly Arg Glu Asp Gly Ser
35 40 45
Cys Met Arg His Val Glu Leu Val Leu Met Val Arg Arg Pro Val Asp
50 55 60
Ser Thr Thr His Trp Pro Val Arg Asn Val Gly Pro Gly Phe Arg Arg
65 70 75 80
Lys Leu Gly Pro Glu Met Ser Ile Trp Lys Ala Pro Gly Trp Lys Arg
85 90 95
Val Val His Ser Thr Ser Ala Ile Ser Leu Thr Arg
100 105

<210> 2599
<211> 356
<212> DNA
<213> Homo sapiens

<400> 2599
nagatcttat acagggacgt gatgttggag aactactgga acctgtgttc tctgggactg
60
tgtcattttg atatgaatat tatctccatg ttggaggaag ggaagagacc ctggactgtg
120
aagagctgtg tgaaaatagc aagaaaacca agaacgcggg aatgtgtcaa aggcgtggtc
180
acagatatcc ctctaaatg tacaatcaag gatttgctac caaaagagaa gagcagtaca
240
gaagcagtat tccacacagt ggtgttggaa agacacgaaa gccctgacat tgaagaattt
300
tccttcaagg aacccagaa aaatgtgcat gattttgagt gtcaatggag agatgn
356

<210> 2600
<211> 118
<212> PRT
<213> Homo sapiens

<400> 2600
Xaa Ile Leu Tyr Arg Asp Val Met Leu Glu Asn Tyr Trp Asn Leu Val
1 5 10 15
Ser Leu Gly Leu Cys His Phe Asp Met Asn Ile Ile Ser Met Leu Glu
20 25 30
Glu Gly Lys Glu Pro Trp Thr Val Lys Ser Cys Val Lys Ile Ala Arg

```

      35              40              45
Lys  Pro  Arg  Thr  Arg  Glu  Cys  Val  Lys  Gly  Val  Val  Thr  Asp  Ile  Pro
   50              55              60
Pro  Lys  Cys  Thr  Ile  Lys  Asp  Leu  Leu  Pro  Lys  Glu  Lys  Ser  Ser  Thr
   65              70              75              80
Glu  Ala  Val  Phe  His  Thr  Val  Val  Leu  Glu  Arg  His  Glu  Ser  Pro  Asp
      85              90              95
Ile  Glu  Asp  Phe  Ser  Phe  Lys  Glu  Pro  Gln  Lys  Asn  Val  His  Asp  Phe
      100              105              110
Glu  Cys  Gln  Trp  Arg  Asp
      115

```

<210> 2601

<211> 329

<212> DNA

<213> Homo sapiens

<400> 2601

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gcgccgatca tgatctacgg cgacgacgtc acccacctgc tcaccgaaga aggcacgcgc
   60
tacttgtaca aggcgcgttc cctggaagag cgccaagcga tgatcgccgg cggtggtggg
   120
gtcaccgcct tcggttgcg ccacaacccc aaggacactg cgcgcatgcg ccgcgaaggc
   180
ttgatcgctc tgcccgaaga cctcggtatc cgccgcaccg acgccaccgc cgaactgttg
   240
gccgccgaaga gcgtggccga cctgggtggag tggtcgggtg gcttgtgtcaa cccgcccgcc
   300
aagttcagga gctggtaaata gcgcgcctt
   329

```

<210> 2602

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2602

```

Ala  Pro  Ile  Met  Ile  Tyr  Gly  Asp  Asp  Val  Thr  His  Leu  Leu  Thr  Glu
   1              5              10              15
Glu  Gly  Ile  Ala  Tyr  Leu  Tyr  Lys  Ala  Arg  Ser  Leu  Glu  Glu  Gln
      20              25              30
Ala  Met  Ile  Ala  Gly  Gly  Gly  Val  Thr  Ala  Phe  Gly  Leu  Arg  His
      35              40              45
Asn  Pro  Lys  Asp  Thr  Ala  Arg  Met  Arg  Arg  Glu  Gly  Leu  Ile  Ala  Leu
   50              55              60
Pro  Glu  Asp  Leu  Gly  Ile  Arg  Arg  Thr  Asp  Ala  Thr  Arg  Glu  Leu  Leu
   65              70              75              80
Ala  Ala  Lys  Ser  Val  Ala  Asp  Leu  Val  Glu  Trp  Ser  Gly  Gly  Leu  Cys
      85              90              95
Asn  Pro  Pro  Ala  Lys  Phe  Arg  Ser  Trp
      100              105

```

<210> 2603

<211> 423

<212> DNA

<213> Homo sapiens

<400> 2603

tcacgatcca ttgctctacc ctttacgggt gtgcacctac gccaggtcg gtggtcagga
 60
 gcatcggttc ggtggtaccg aggtcgagga cttccttcac gccgttgttc gccgagggga
 120
 ggttgttgga agtggtcagg tggggccaga tctgggcact gatcacctcg gtgaaatcga
 180
 agctctgggt accctgagcg gtcgccgaca cgacacggtc cacaccggag accagaccga
 240
 tctcggagat gatcgcgtaa ctttcattgt cgtagaggat cttgcacgca tcgatgatgc
 300
 gcttgatctc cttggcagtg aagatgattt ccacgggggt gttggccgac agatactgac
 360
 cggagctggt ggtcacctgg gtggaatcca ggtcatccgg aaccgggttc aggttgtccg
 420
 cgg
 423

<210> 2604

<211> 103

<212> PRT

<213> Homo sapiens

<400> 2604

Met	Glu	Ile	Ile	Phe	Thr	Ala	Lys	Glu	Ile	Lys	Arg	Ile	Ile	Asp	Ala
1				5				10				15			
Cys	Lys	Ile	Leu	Tyr	Asp	Asn	Glu	Gly	Tyr	Ala	Ile	Ile	Ser	Glu	Ile
			20					25				30			
Gly	Leu	Val	Ser	Gly	Val	Asp	Arg	Val	Val	Ser	Ala	Thr	Ala	Gln	Gly
		35				40					45				
Asn	Gln	Ser	Phe	Asp	Phe	Thr	Glu	Val	Ile	Ser	Ala	Gln	Ile	Val	Ala
	50				55					60					
His	Leu	Thr	Thr	Tyr	His	Asn	Leu	Pro	Ser	Ala	Asn	Asn	Gly	Val	Lys
65				70					75				80		
Glu	Val	Leu	Asp	Leu	Gly	Thr	Thr	Glu	Pro	Met	Leu	Leu	Thr	Thr	Asp
			85					90					95		
Leu	Gly	Val	Gly	Ala	Gln	Pro									
			100												

<210> 2605

<211> 354

<212> DNA

<213> Homo sapiens

<400> 2605

ngggaggag ggcacgtcaa aagcgactgt atccagaggg ttgtatttaa acatttttca
 60
 aaacatatgt ggcaaacagc ggggggaggg gatctcacca acgtttttct ccaattcttc
 120
 tttgatctgt gggacctgtt ccactttcaa aatgtgtcat ttggaagga aaggaggaa
 180

caactacttg aaaggaatac acgtcagtat gagccctttc tcctcagcag aagggtgccc
 240
 caaagtacct cctctgaggc gagagaaagg agagaggagg agagacagct ttcatacaat
 300
 ggggcaccca ggactctagg gagagaggca cgttctcaca aaggcccttt gage
 354

<210> 2606
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 2606
 Met Ser Lys Ala Thr Val Ser Arg Gly Phe Asp Leu Asn Ile Phe Gln
 1 5 10 15
 Asn Ile Cys Gly Lys Gln Arg Gly Glu Gly Ile Ser Pro Thr Phe Phe
 20 25 30
 Ser Thr Ser Ser Leu His Ala Gly Thr Cys Ser Thr Phe Lys Met Cys
 35 40 45
 His Phe Gly Arg Lys Gly Arg Asn Asn Tyr Leu Lys Gly Ile His Val
 50 55 60
 Ser Met Ser Pro Phe Ser Ser Ala Glu Gly Cys Pro Lys Val Pro Pro
 65 70 75 80
 Leu Arg Arg Glu Lys Gly Glu Arg Arg Arg Asp Ser Phe His Gln Met
 85 90 95
 Gly His Pro Gly Leu
 100

<210> 2607
 <211> 297
 <212> DNA
 <213> Homo sapiens

<400> 2607
 tgatacaagaa caatgatacg atatacctaac caacagagga agcaacggaa gttgtgtgtg
 60
 tttttatgct gttttttttt ttgagaacg gatcttgccc ctgccccccag gccggaatgg
 120
 atgacatgga cagaaccccg tcggaaaaaa gccggaatgt gcaaacccea attcccacca
 180
 caccggggggc ctaacaattg gatccatccc cnaaaaaaanc cntnncaaaa aaagntaaaa
 240
 actttttttt ttttaaan nn anacccccaa aaaaacacaa aaaaaaaatt taaaaaa
 297

<210> 2608
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 2608
 Met Ile Arg Tyr Pro Asn Gln Gln Arg Lys Gln Arg Lys Leu Leu Leu
 1 5 10 15
 Phe Leu Cys Cys Phe Phe Phe Leu Arg Thr Asp Leu Ala Pro Ala Pro

	20						25						30					
Arg	Pro	Glu	Trp	Met	Thr	Trp	Thr	Glu	Pro	Arg	Arg	Lys	Lys	Ala	Gly			
			35					40				45						
Met	Cys	Lys	Pro	Lys	Phe	Pro	Pro	His	Gly	Gly	Pro	Asn	Asn	Trp	Ile			
		50				55					60							
His	Pro	Xaa	Lys	Xaa	Pro	Xaa	Gln	Lys	Lys	Xaa	Lys	Thr	Phe	Phe	Phe			
65					70					75					80			
Leu	Xaa	Xaa	Xaa	Pro	Gln	Lys	Asn	Gln	Lys	Lys	Lys	Phe	Lys	Lys				
				85					90				95					

```
<210> 2609
<211> 305
<212> DNA
<213> Homo sapiens
```

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<400> 2609
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60
ttgacacgtc cctgacgac cctatccgat catctggaga cccatgcgtt ccttggaacc
120
caattgccta cgaaaaaatt ttttttttcc cccccaaaaa acaccccccc ctcgcgatctg
180
tgaaagtctt acctcggggt cgtcatctcg gctgctatcg tcggcaaatc actcagctgg
240
ccgtaccctt cgtcatcgcc cgggccaccg acctcgacgg cncagcgtgc acggcaacga
300
ccacc
305
```

```
<210> 2610
<211> 98
<212> PRT
<213> Homo sapiens
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[illegible]

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<210> 2611
<211> 342
<212> DNA
<213> Homo sapiens
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<400> 2611
 gccgccgcga tcgacggcga ctctctcgacc agctgggtgt ccagctcgct gcaaaccgct
 60
 gtggggcaat ggcttcaggt ggacttcgac catccggtga ccaacgcgac catcacctg
 120
 acgcccacgcg ccaccgtgt cggagctcag gtgcgccgcg tcgagggtgc aacagccaac
 180
 ggcaccagca caattcgctt cgaccagccc ggcaagccgc tgacggcggc gctgcctac
 240
 ggcgagacct catgggtccg gttcaccgcg accggcaccg acgacggctc ccccggcgtg
 300
 cagttcggca tcaccgactt ctccgtgacg cagtacgacg cg
 342

<210> 2612
 <211> 114
 <212> PRT
 <213> Homo sapiens

<400> 2612
 Ala Ala Ala Ile Asp Gly Asp Ser Ser Thr Ser Trp Val Ser Ser Ser
 1 5 10 15
 Leu Gln Thr Ala Val Gly Gln Trp Leu Gln Val Asp Phe Asp His Pro
 20 25 30
 Val Thr Asn Ala Thr Ile Thr Leu Thr Pro Ser Ala Thr Ala Val Gly
 35 40 45
 Ala Gln Val Arg Arg Val Glu Val Ala Thr Ala Asn Gly Thr Ser Thr
 50 55 60
 Ile Arg Phe Asp Gln Pro Gly Lys Pro Leu Thr Ala Ala Leu Pro Tyr
 65 70 75 80
 Gly Glu Thr Ser Trp Val Arg Phe Thr Ala Thr Gly Thr Asp Asp Gly
 85 90 95
 Ser Pro Gly Val Gln Phe Gly Ile Thr Asp Phe Ser Val Thr Gln Tyr
 100 105 110
 Asp Ala

<210> 2613
 <211> 414
 <212> DNA
 <213> Homo sapiens

<400> 2613
 acgcgtgtgg gttgtgcaca gggcatggct gctctggaca ggctcgggcc ctgggcatca
 60
 ttctctctct ccaaaagggt agggctctgac ctaatggtac tttgtctgat gttttccaga
 120
 tatgccctca ctgggaagggt ccaagtgggc aggacagatc tgggggtggag cgagggtggg
 180
 ctgggaagca ctctctgttt tctgctgccc cagaacgaat gcaagttctg gcagcttctc
 240
 ctctctctgg gaggaggaaa ggagggctcg cctccaggtc tcaggctgag ggagtggtg
 300

ggagaccctc tagatggcca gcagaggctg gcctctgtga gaaggcttcc ttgcgtgact
 360
 ctggggcccc tcccaggctc tcctcgtggc aggcaggac ttgggccagc atgg
 414

<210> 2614
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 2614
 Met Val Leu Cys Leu Met Phe Ser Arg Tyr Ala Pro Thr Gly Lys Gly
 1 5 10 15
 Gln Val Gly Arg Gln Ser Leu Gly Trp Ser Glu Val Gly Leu Gly Ser
 20 25 30
 Thr Pro Ala Phe Leu Leu Pro Gln Asn Glu Cys Lys Phe Trp Gln Leu
 35 40 45
 Leu Leu Leu Leu Gly Gly Gly Lys Glu Gly Ser Pro Pro Gly Leu Arg
 50 55 60
 Leu Arg Glu Trp Ala Gly Asp Pro Leu Asp Gly Gln Gln Arg Leu Ala
 65 70 75 80
 Ser Val Arg Arg Leu Pro Cys Val Thr Leu Gly Pro Leu Pro Gly Ser
 85 90 95
 Pro Arg Gly Arg Gln Gly Leu Gly Pro Ala Trp
 100 105

<210> 2615
 <211> 394
 <212> DNA
 <213> Homo sapiens

<400> 2615
 nnngccgccc ccctcggccg cagcgcgctt cttttgcgc ncaacgtcag ccagaaggcg
 60
 gacgtcgacg ccattgctgaa ggaaacgctg gccaggttcg gccacatcga tatcctcgtc
 120
 aacaatgcgg gcgtcacgca tgcggccgat ttctcgacg tgtgcgaaga cgatttcgac
 180
 cgggtcatcg gcattaacct gaaatcgatg ttctgtgtcg gccaggccgc ggcgcgcgag
 240
 atggtcaacg gcaacagcgg ctgcatcatc aacatgtcca cggtgaatgc ggaactggcc
 300
 attccgaacc aggtgccgta cgtggtgtcg aaaggcgcca tcaaccagct gaccaaggtc
 360
 atggccttga acctggcgcc gcacggtgcg cgct
 394

<210> 2616
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 2616
 Xaa Ala Ala Ala Leu Gly Arg Ser Ala Leu Leu Leu Arg Xaa Asp Val

```

      1           5           10           15
Ser  Gln  Lys  Ala  Asp  Val  Asp  Ala  Met  Leu  Lys  Glu  Thr  Leu  Ala  Gln
      20           25           30
Phe  Gly  His  Ile  Asp  Ile  Leu  Val  Asn  Asn  Ala  Gly  Val  Thr  His  Ala
      35           40           45
Ala  Asp  Phe  Leu  Asp  Val  Cys  Glu  Asp  Asp  Phe  Asp  Arg  Val  Met  Arg
      50           55           60
Ile  Asn  Leu  Lys  Ser  Met  Phe  Leu  Cys  Gly  Gln  Ala  Ala  Ala  Arg  Glu
      65           70           75           80
Met  Val  Lys  Arg  Asn  Ser  Gly  Cys  Ile  Ile  Asn  Met  Ser  Ser  Val  Asn
      85           90           95
Ala  Glu  Leu  Ala  Ile  Pro  Asn  Gln  Val  Pro  Tyr  Val  Val  Ser  Lys  Gly
      100          105          110
Ala  Ile  Asn  Gln  Leu  Thr  Lys  Val  Met  Ala  Leu  Asn  Leu  Ala  Pro  His
      115          120          125
Gly  Ala  Arg
      130

```

<210> 2617

<211> 513

<212> DNA

<213> Homo sapiens

<400> 2617

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naccggttgg catcatgctc acagcactgg gggttccctt ctttcttttc ctctcagaa
60
agacattgtg agatgggaaa tatcatggaa acacctatac tttccggctc ccacttgaac
120
gtcaccttgg gaaatcacia gattctcaat gacgtctccg tatcattcca agcgggagtt
180
atgcacgcca tacttggccc caacggttct gggaagacca ccctggtacg cacgttatgc
240
ggagccctct cccccgagtc ggggagcgtc aaattcgtat gaacggatct atccacgatg
300
tcgcgcatct gtatcgcgcg tcgtatttgc atcgtctggc agagcgcgac cgctccctct
360
gacctcaccg tacgtcacct cgttgggtac gggagatatg cccacacacc gtggtggcag
420
ataagggaca ccagcgccga cagccatgtg gaacaagcaa tggagctggc cgatgtcacg
480
tgcttcgccg atcgacgctg caccactctc tca
513

```

<210> 2618

<211> 171

<212> PRT

<213> Homo sapiens

<400> 2618

```

Xaa  Arg  Leu  Ala  Ser  Cys  Ser  Gln  His  Trp  Gly  Phe  Pro  Ser  Phe  Phe
      1           5           10           15
Ser  Ser  Ser  Glu  Arg  His  Cys  Glu  Met  Gly  Asn  Ile  Met  Glu  Thr  Pro
      20           25           30
Ile  Leu  Ser  Gly  Ser  His  Leu  Asn  Val  Thr  Leu  Gly  Asn  His  Lys  Ile

```

```

      35              40              45
Leu Asn Asp Val Ser Val Ser Phe Gln Ala Gly Val Met His Ala Ile
  50              55              60
Leu Gly Pro Asn Gly Ser Gly Lys Thr Thr Leu Val Arg Thr Leu Cys
  65              70              75              80
Gly Ala Leu Ser Pro Glu Ser Gly Ser Val Lys Phe Asp Gly Thr Asp
      85              90              95
Leu Ser Thr Met Ser Ala Ser Cys Ile Ala Arg Arg Ile Ala Ile Val
      100              105              110
Trp Gln Ser Ala Thr Ala Pro Ser Asp Leu Thr Val Arg His Leu Val
      115              120              125
Gly Tyr Gly Arg Tyr Ala His Thr Pro Trp Trp Gln Ile Arg Asp Thr
      130              135              140
Ser Ala Asp Ser His Val Glu Gln Ala Met Glu Leu Ala Asp Val Thr
      145              150              155              160
Cys Phe Ala Asp Arg Arg Val Thr Thr Leu Ser
      165              170

```

<210> 2619

<211> 348

<212> DNA

<213> Homo sapiens

<400> 2619

```

nnaaatttcg acgaccttga ggttttcctc aagctgttgc cgcgttcggc anccggggaa
60
cggtatgaacc cgtacaactc ggtgtggagc ggtgtgaccg acggtgacgg gccgcaggaa
120
cagcacgtca ttttccttga taacggtcgt accgacgtgc ttgccgacac ctttggtcgc
180
gaagtgttgc ggtgcatccg gtgtgcttcg tgtatcaata tctgcccggt ttacgagcgg
240
gcggggcggt acccttaacg ctccggtgtac cccggggcga ttggtgcggt gctcaatccg
300
cagctgcggg gcgtggagca tcccgctgat cgtggtctgc catacgcg
348

```

<210> 2620

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2620

```

Xaa Asn Phe Asp Leu Glu Val Phe Leu Lys Leu Leu Pro Arg Ser
  1              5              10              15
Ala Xaa Gly Glu Arg Met Asn Pro Tyr Asn Ser Val Trp Ser Gly Val
      20              25              30
Thr Asp Gly Asp Gly Pro Gln Glu Gln His Val Ile Phe Leu Asp Asn
      35              40              45
Gly Arg Thr Asp Val Leu Ala Asp Thr Leu Gly Arg Glu Val Leu Arg
      50              55              60
Cys Ile Arg Cys Ala Ser Cys Ile Asn Ile Cys Pro Val Tyr Glu Arg
      65              70              75              80
Ala Gly Gly His Pro Tyr Gly Ser Val Tyr Pro Gly Pro Ile Gly Ala

```

	85		90		95										
Val	Leu	Asn	Pro	Gln	Leu	Arg	Gly	Val	Glu	His	Pro	Val	Asp	Arg	Gly
		100					105						110		
Leu	Pro	Tyr	Ala												
		115													

<210> 2621

<211> 1485

<212> DNA

<213> Homo sapiens

<400> 2621

```

acgcgtgcag gtaaaccaga ggccgtgtga ccagctcagt gctggtttac ggaacaactc
60
ttacttttaa aaattacttg ttcccccata ttgttgagtg ccgcgcttg gtttcttatg
120
ttttcttttc ctgttttgat ttgtctgaag ggagaggtgg tgggtggttag gatcagagct
180
ctctggcat ccgtggggag gatttgctgg tgggtggcttc gggctcatgc ccagacacac
240
tcaactgccc gtctgtccaa ggctctccct tcccccttgc tgggtgggagg agctcgtgtg
300
ctccttgccc gcttactgga agggcgcttt tcagagctgc agggacaggg tgagcagctg
360
aagggtctag agggaagccg gcccccgctc tgcagaagct gcatttcagc tgaatctgtg
420
tttcagcttc agttgggtgc accgttagcc cctctctccc cggtaggtca tgtttttgtc
480
acattagaga ataaacagcc acacacacat ttttttttcc tttaaaacag taacttgga
540
atatgaaaaa gccagaagga ggagcaaggg ctgttttctg gagtggttga ggtgtgtgcc
600
tgcagttgtc attgtcttct ccaccgggct gttcccatat atttctctgt gaactgaatc
660
ctctctccct ccaactcttg ggagcccagg tggctccttg ccaccattca ggctttccaa
720
gaagccaacc accttgagga ttttttttct tgaatttgc tgttttcttc tgcttccctt
780
agataaaaaa cagctcaaga gaccttatct tagggatgag aaaaacatgc atattaattc
840
catctgagtg attgtcagtg taaggccttt taaaacaaaa gcaagtctct tgttaggaat
900
tgggtcaaaa tcatctcttt cttaaagccc atcaactccc aggcaggttt gagttactca
960
gttacctaag ctgtctattc atccaaatca ttttctagag tcaactgtata aggtctctatg
1020
agtagctgtg tatgaataaa tattacctgt ctacctcaaa atacacatac tgctgaagca
1080
ttctgtacaa ccgtgtgtta tcacagtgc gttttaagtg taacngttga acttaggcac
1140
tttctgtgt ggcggaataa gaaaggatnt aacagttaca agcttccaaa ttcagataaa
1200
attaaatcac agttcagatg aaactgaata tcattgtaat aatctcataa tatatatattg
1260

```

taacttgnta gctatctttg aaatcaactgn actttgcaat ggtgctaagc tgatagattt
 1320
 aaatacacag acgggcgagt ggcgcccggtg tcgatgtctt cagccagtgg tgaccctgct
 1380
 ttgttaaccg cgtaaacctg acaaaacctc agcagcagaa gtccctattt ttctaggagt
 1440
 ttatcgtgca gacagtcttc actacaggac tcggccctgg ggccc
 1485

<210> 2622

<211> 83

<212> PRT

<213> Homo sapiens

<400> 2622

Met	Phe	Ser	Phe	Pro	Val	Leu	Ile	Leu	Leu	Lys	Gly	Glu	Val	Val	Val
1					5					10				15	
Val	Arg	Ile	Arg	Ala	Leu	Leu	Ala	Ser	Val	Gly	Arg	Ile	Cys	Trp	Trp
			20					25					30		
Trp	Leu	Arg	Ala	His	Ala	Gln	Thr	His	Ser	Leu	Pro	Arg	Leu	Ser	Lys
		35				40						45			
Ala	Ser	Pro	Ser	Pro	Leu	Leu	Val	Gly	Gly	Ala	Arg	Val	Leu	Leu	Gly
	50					55				60					
Arg	Leu	Leu	Glu	Gly	Arg	Phe	Ser	Glu	Leu	Gln	Gly	Gln	Gly	Glu	Gln
65					70					75				80	
Leu	Lys	Gly													

<210> 2623

<211> 3524

<212> DNA

<213> Homo sapiens

<400> 2623

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 60
 gcgaacggcg ctgcggcgcc ggcgggaccc ccaggcctcc tccgggggat gaaaatcggc
 120
 agtgggttcc tgagtggcgg cggagggtacc ggcastagcg gtggttagcg ctccggcgcc
 180
 ggtggtagtg gcggcgcgcc cggcgcgccg agcagcgcca ggagggcaga gatggaaccc
 240
 acctttcccc aggggtatggt tatgttcaac caccgtcttc ccccggtcac cagcttcacc
 300
 cggcggcgcc ggtagcgccg cctcccccgc caatgcgtgt tatectctc tacctccgca
 360
 gccccggcgg ctgagccccc cctcccgcca gccccggaca tgactttcaa gaaggagccg
 420
 gcggcgctcag ccgcggcctt cccctcgtag aggaacctct ggggggtctt gcagttcttt
 480
 gttagcatca aacaggagaa acccgcgat cctgaggagc agcagtcaca ccaccacct
 540
 caccaccacc actatggggg gctgttcgct ggagctgaag agaggtctcc aggcctagga
 600

ggcgggtgaag gggggagtca cggcggtcatc caggacctca gtattctcca ccagcatgtc
660
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<211> 895

<212> PRT

<213> Homo sapiens

<400> 2624

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<211> 1398

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<213> Homo sapiens

<400> 2625

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<212> PRT

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<212> DNA

<213> Homo sapiens

<400> 2627

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<213> Homo sapiens

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Asp Cys Thr Cys Ile Ser Thr Ala Glu Leu Phe Ile Cys Asp Ser Ala
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<210> 2629

<211> 650

<212> DNA

<213> Homo sapiens

<400> 2629

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<212> PRT

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

<400> 2631

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<211> 550

<212> PRT

<213> Homo sapiens

<400> 2632

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Asn	Ser	Gln	Phe	Asn	Tyr	Gly	Met	Gln	Pro	Leu	Met	Tyr	Ser	Val	Gln
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Glu	Ala	Leu	Asn	Ala	Arg	Pro	Trp	Trp	Ile	Arg	Met	Gly	Thr	Asp	Ile
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Cys	Tyr	Tyr	Lys	Asn	His	Phe	Ser	Arg	Ser	Ser	Val	Ala	Ala	Gly	Gly
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Ser	Thr	Leu	Gln	Met	His	Leu	Gln	Lys	Leu	Glu	Ser	Ala	His	Asn	Pro
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Glu Ser Tyr Ile Phe Lys Ile Val Pro Met Leu Asn Pro Asp Gly Val
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Ile Asn Gly Asn His Arg Cys Ser Leu Ser Gly Glu Asp Leu Asn Arg
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Gln Trp Gln Ser Pro Ser Pro Asp Leu His Pro Thr Ile Tyr His Ala
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Lys Gly Leu Leu Gln Tyr Leu Ala Ala Val Lys Arg Leu Pro Leu Val
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Tyr Cys Asp Tyr His Gly His Ser Arg Lys Lys Asn Val Phe Met Tyr
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Leu Ser His Ile Ala Pro Ala Phe Cys Met Ser Ser Cys Ser Phe Val
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<210> 2633

<211> 1569

<212> DNA

<213> Homo sapiens

<400> 2633

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180

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<210> 2634

<211> 59

<212> PRT

<213> Homo sapiens

<400> 2634

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<210> 2635

<211> 1062

<212> DNA

<213> Homo sapiens

<400> 2635

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<211> 63
 <212> PRT
 <213> Homo sapiens

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 <212> DNA
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<210> 2638

<211> 263

<212> PRT

<213> Homo sapiens

<400> 2638

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Leu Gln Glu Ala Gly Thr Phe Arg His Thr Leu Trp Lys Arg Val Gln
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Gly Ala Val Thr Pro Leu Leu Ala Ser Met Ile Ser Phe Ile Asp Arg
65           70           75           80
Asp Gly Asn Leu Glu Leu Leu Thr Arg Pro Asp Thr Pro Pro Trp Ala
          85           90           95
Arg Asp Leu Trp Met Phe Ile Phe Ser Asp Thr Met Leu Leu Asn Ile
          100          105          110
Pro Leu Val Met Asn Asn Glu Arg His Lys Gly Glu Met Ala Tyr Ile
          115          120          125
Val Val Gln Asn His Met Asn Leu Ser Glu Asn Ala Ser Asn Asn Val
          130          135          140
Pro Phe Ser Trp Lys Ile Lys Asp Tyr Leu Glu Glu Leu Trp Val Gln
145          150          155          160
Ala Gln Tyr Ile Thr Asp Ala Glu Gly Leu Pro Lys Lys Phe Val Asp
          165          170          175
Ile Phe Gln Gln Thr Pro Leu Gly Arg Phe Leu Ala Gln Leu His Gly
          180          185          190
Glu Pro Gln Gln Glu Leu Leu Gln Cys Tyr Leu Lys Asp Phe Ile Leu
          195          200          205
Leu Thr Met Arg Val Ser Thr Glu Glu Glu Leu Lys Phe Leu Gln Met
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Ala Leu Trp Ser Cys Thr Arg Lys Leu Lys Ala Ala Ser Glu Ala Pro
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<212> DNA

<213> Homo sapiens

<400> 2639

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120
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<212> PRT

<213> Homo sapiens

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Pro Ser His Ser Gly Ser Ser Ser Ser Arg Arg Ser Cys Gln Gln Glu
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His Cys Lys Pro Ser Lys Asn Gly Leu Lys Gly Ser Gly Ser Leu His
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<211> 744

<212> DNA

<213> Homo sapiens

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<400> 2642
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 Ser Asp Ile Glu Ile Pro Ser Val Val Ser Val Gln Ser Val Gln Lys
 65 70 75 80
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 85 90 95
 Ala Leu Gln Ile Leu Thr Ala Ala Ser Ile Leu Gln Ile Lys Thr Val
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 Ile Asp Glu Cys Thr Arg Ile Val Ser Gln Asn Val Gly Asp Val Phe
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<211> 871

<212> PRT

<213> Homo sapiens

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Lys Asn Ser Pro Leu Met Glu Asp Phe Phe Glu Glu Gly Phe Ser Gln
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<210> 2646

<211> 199

<212> PRT

<213> Homo sapiens

<400> 2646

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Ala Arg Trp Glu His Lys Thr Arg Lys Leu Ser Arg Ala Phe Gly Ser
      35           40           45
Pro Tyr Leu Ala Cys Tyr Ser Leu Ser Ile Thr Ile Leu Leu Leu Asn
      50           55           60
Phe Leu Arg Ser His Cys Phe Thr Gln Ala Met Leu Ser Gln Pro Arg
      65           70           75           80
Met Glu Ser Leu Asp Thr Pro Ala Ala Tyr Ser Leu Gly Leu Ala Leu
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Leu Gly Leu Gly Val Val Leu Val Leu Ser Ser Phe Phe Ala Leu Gly
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Phe Ala Gly Thr Phe Leu Gly Asp Tyr Phe Gly Ile Leu Lys Glu Ala
      115          120          125
Arg Val Thr Val Phe Pro Phe Asn Ile Leu Asp Asn Pro Met Tyr Trp
      130          135          140
Gly Ser Thr Ala Asn Tyr Leu Gly Trp Ala Ile Met His Ala Ser Pro
      145          150          155          160
Thr Gly Leu Leu Leu Thr Val Leu Val Ala Leu Thr Tyr Ile Met Ala
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Leu Leu Tyr Glu Glu Pro Phe Thr Ala Glu Ile Tyr Arg Gln Lys Ala
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Ser Gly Ser His Lys Arg Ser
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<210> 2647

<211> 1368

<212> DNA

<213> Homo sapiens

<400> 2647

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480

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<210> 2648

<211> 389

<212> PRT

<213> Homo sapiens

<400> 2648

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 35 40 45
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 50 55 60
 Gln Lys Arg Leu Asp Lys Glu Thr Glu Lys Lys Arg Arg Thr Glu Glu
 65 70 75 80
 Ala Tyr Lys Asn Ala Met Thr Glu Leu Lys Lys Lys Ser His Phe Gly
 85 90 95
 Gly Pro Asp Tyr Glu Glu Gly Pro Asn Ser Leu Ile Asn Glu Glu Glu
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Val Gly Gly Asp Ala Asn Trp Gln Leu Val Val Glu Glu Gly Glu Met
      180              185              190
Lys Val Tyr Arg Arg Glu Val Glu Glu Asn Gly Ile Val Leu Asp Pro
      195              200              205
Leu Lys Ala Thr His Ala Val Lys Gly Val Thr Gly His Glu Val Cys
      210              215              220
Asn Tyr Phe Trp Asn Val Asp Val Arg Asn Asp Trp Glu Thr Thr Ile
      225              230              235              240
Glu Asn Phe His Val Val Glu Thr Leu Ala Asp Asn Ala Ile Ile Ile
      245              250              255
Tyr Gln Thr His Lys Arg Val Trp Pro Ala Ser Gln Arg Asp Val Leu
      260              265              270
Tyr Leu Ser Val Ile Arg Lys Ile Pro Ala Leu Thr Glu Asn Asp Pro
      275              280              285
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      290              295              300
Leu Asn Asn Arg Cys Val Arg Ala Lys Ile Asn Val Ala Met Ile Cys
      305              310              315              320
Gln Thr Leu Val Ser Pro Pro Glu Gly Asn Gln Glu Ile Ser Arg Asp
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Asn Ile Leu Cys Lys Ile Thr Tyr Val Ala Asn Val Asn Pro Gly Gly
      340              345              350
Trp Ala Pro Ala Ser Val Leu Arg Ala Val Ala Lys Arg Glu Tyr Pro
      355              360              365
Lys Phe Leu Lys Arg Phe Thr Ser Tyr Val Gln Glu Lys Thr Ala Gly
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<210> 2649

<211> 1299

<212> DNA

<213> Homo sapiens

<400> 2649

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420

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<211> 428

<212> PRT

<213> Homo sapiens

<400> 2650

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			20					25				30			
Glu	Glu	Asp	Arg	Asp	Gly	Leu	Trp	Asp	Ala	Trp	Gly	Pro	Trp	Ser	Glu
		35				40					45				
Cys	Ser	Arg	Thr	Cys	Gly	Gly	Gly	Ala	Ser	Tyr	Ser	Leu	Arg	Arg	Cys
	50					55				60					
Leu	Ser	Ser	Lys	Ser	Cys	Glu	Gly	Arg	Asn	Ile	Arg	Tyr	Arg	Thr	Cys
65				70					75					80	
Ser	Asn	Val	Asp	Cys	Pro	Pro	Glu	Ala	Gly	Asp	Phe	Arg	Ala	Gln	Gln
			85					90					95		
Cys	Ser	Ala	His	Asn	Asp	Val	Lys	His	His	Gly	Gln	Phe	Tyr	Glu	Trp
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Ala	Lys	Gly	Thr	Thr	Leu	Val	Val	Glu	Leu	Ala	Pro	Lys	Val	Leu	Asp

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 Arg Gly Gln Tyr Lys Ser Gln Leu Ser Ala Thr Lys Ser Asp Asp Thr
 195 200 205
 Val Val Ala Ile Pro Tyr Gly Ser Arg His Ile Arg Leu Val Leu Lys
 210 215 220
 Gly Pro Asp His Leu Tyr Leu Glu Thr Lys Thr Leu Gln Gly Thr Lys
 225 230 235 240
 Gly Glu Asn Ser Leu Ser Ser Thr Gly Thr Phe Leu Val Asp Asn Ser
 245 250 255
 Ser Val Asp Phe Gln Lys Phe Pro Asp Lys Glu Ile Leu Arg Met Ala
 260 265 270
 Gly Pro Leu Thr Ala Asp Phe Ile Val Lys Ile Arg Asn Ser Gly Ser
 275 280 285
 Ala Asp Ser Thr Val Gln Phe Ile Phe Tyr Gln Pro Ile Ile His Arg
 290 295 300
 Trp Arg Glu Thr Asp Phe Phe Pro Cys Ser Ala Thr Cys Gly Gly Gly
 305 310 315 320
 Tyr Gln Leu Thr Ser Ala Glu Cys Tyr Asp Leu Arg Ser Asn Arg Val
 325 330 335
 Val Ala Asp Gln Tyr Cys His Tyr Tyr Pro Glu Asn Ile Lys Pro Lys
 340 345 350
 Pro Lys Leu Gln Glu Cys Asn Leu Asp Pro Cys Pro Ala Ser Asp Gly
 355 360 365
 Tyr Lys Gln Ile Met Pro Tyr Asp Leu Tyr His Pro Leu Pro Arg Trp
 370 375 380
 Glu Ala Thr Pro Trp Thr Ala Cys Ser Ser Ser Cys Gly Gly Gly Ile
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<210> 2651

<211> 628

<212> DNA

<213> Homo sapiens

<400> 2651

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<210> 2652

<211> 209

<212> PRT

<213> Homo sapiens

<400> 2652

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			20					25					30		
Leu	Asn	Leu	Ile	Phe	Ile	Val	Leu	Glu	Thr	Gly	Arg	Val	Thr	Lys	Thr
		35				40						45			
Lys	Asp	Gly	His	Glu	Val	Arg	Thr	Cys	Lys	Val	Ala	Asp	Lys	Thr	Gly
		50				55				60					
Ser	Ile	Asn	Ile	Ser	Val	Trp	Asp	Asp	Val	Gly	Asn	Leu	Ile	Gln	Pro
65				70						75				80	
Gly	Asp	Ile	Ile	Arg	Leu	Thr	Lys	Gly	Tyr	Ala	Ser	Val	Phe	Lys	Gly
				85					90					95	
Cys	Leu	Thr	Leu	Tyr	Thr	Gly	Arg	Gly	Gly	Asp	Leu	Gln	Lys	Ile	Gly
			100					105					110		
Glu	Phe	Cys	Met	Asp	Tyr	Ser	Glu	Val	Pro	Asn	Phe	Ser	Glu	Pro	Asn
			115				120						125		
Pro	Glu	Tyr	Ser	Thr	Gln	Gln	Ala	Pro	Asn	Lys	Ala	Val	Gln	Asn	Asp
			130			135					140				
Ser	Asn	Pro	Ser	Ala	Ser	Gln	Pro	Thr	Thr	Gly	Pro	Ser	Ala	Ala	Ser
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Pro	Ala	Ser	Glu	Asn	Gln	Asn	Gly	Asn	Gly	Met	Ser	Ala	Pro	Pro	Gly
				165					170					175	
Phe	Arg	Val	Val	Ala	His	Ile	Pro	Leu	Ile	Leu	Pro	Pro	Thr	His	Pro
			180					185					190		
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<210> 2653

<211> 2103

<212> DNA

<213> Homo sapiens

<400> 2653

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<211> 70

<212> PRT

<213> Homo sapiens

<400> 2654

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		20						25					30		
Ser	Asp	Ser	Lys	Cys	Leu	Leu	Leu	Gly	Ala	Val	Ala	His	Ala	Cys	
		35				40				45					
Asn	Pro	Ser	Thr	Leu	Gly	Gly	Arg	Gly	Gly	Arg	Ile	Thr	Arg	Ser	Gly
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<211> 1752

<212> DNA

<213> Homo sapiens

<400> 2655

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<210> 2656

<211> 493

<212> PRT

<213> Homo sapiens

<400> 2656

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Met Glu Thr Met Trp Glu Ile Pro Ala Ile Gly His Phe Leu Cys Leu
1      5      10      15
Ala Gln Gln Ile Leu Asn Leu Pro Glu Ile Val Phe Tyr Glu Leu Glu
20      25      30
Arg Cys Leu Leu Met Pro Gln Cys Asn Ala Phe Leu Ser Lys Ile Met
35      40      45
Thr Ser Leu Leu Ser Pro Pro His Arg Arg Pro Thr Leu His Arg Arg
50      55      60
Pro Thr Leu Pro Tyr Arg Thr Trp Glu Ala Ala Leu Arg Gln Lys Val
65      70      75      80
Gln Gln Trp Tyr Thr Ala Val Gly Gln Thr Glu Asn Pro Asp Asn Cys
85      90      95
Ala Glu Lys Leu Gly Leu Cys Pro Gln Phe Phe Lys Val Leu Gly Glu
100      105      110
Val Asn Pro Leu Glu Glu Lys Pro Phe His Glu Leu Pro Phe Tyr Gln
115      120      125
Lys Val Trp Leu Leu Lys Gly Leu Cys Asp Phe Val Tyr Asp Thr His
130      135      140
Lys Glu Val Gln Asp Ala Val Leu Gly Gln Pro Ile His Glu Cys Arg
145      150      155      160
Ala Val Ile Leu Arg Tyr Asp Tyr Leu Glu Thr Ala Tyr Val His Phe
165      170      175
Pro Gln Phe Cys Gly Ala Asp Val Arg Ile Tyr Lys Gln Arg Pro Phe
180      185      190
Gln Ala Pro Glu Phe Pro Ile Pro Pro Ile Lys Ile Gln Arg Val Pro
195      200      205
Arg Ile Lys Leu Glu Lys Leu Lys Cys Asp Tyr Val Ser Thr Ser Asn
210      215      220
Gly Glu His Arg Cys Ser Arg Asp Ser Leu Pro Ser Ser Phe Lys Lys
225      230      235      240
Glu Gln Glu Asn Asn Phe Asp Pro Ala Cys Cys Pro Ala Lys Met Ile
245      250      255
Leu Asp Asn His Asp Ile Ser Val Glu Met Gly Val Lys Ser Asn Tyr
260      265      270
Glu Ile Arg Ile Arg Arg Pro Cys Glu Ile Lys Lys Thr Asp Cys Cys
275      280      285
Lys Glu Asn Leu Glu Lys Pro Arg Ser Pro Gly Glu Val Thr Gly Phe
290      295      300
Gly Glu Pro Leu Ser Pro Gly Glu Ile Arg Phe Ile Glu Asn Gln Glu
305      310      315      320
Lys Tyr Gly Glu Ala Ser Arg Ile Lys Ile Glu Pro Ser Pro Leu Lys
325      330      335
Glu Asn Thr Leu Lys Ser Cys Gln Ile His Val Asn Gly Ser His Ser
340      345      350
Asp His Pro Glu Ile Asn Cys His Lys Val Val Arg Asp Ile Leu Leu
355      360      365
Glu Gln Ser Leu Gln Ser His Lys Lys Leu Lys Leu Thr Lys Met Arg
370      375      380
Ala Lys Lys Lys Lys Lys Lys Lys Lys Leu Lys Asp Val Leu Asn
385      390      395      400
Glu Asn Leu Gln Arg Lys Arg Glu Gly Leu His Ser Leu Ala Phe Lys
405      410      415
Ser Tyr Lys Pro Glu Ile Gln Asn Lys Leu Leu Ile Ile Lys Lys Lys

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	420		425		430
Ala	Lys	His	Lys	Lys	His
	435		440		445
Ala	Ile	Thr	Lys	Lys	Arg
	450		455		460
Glu	Phe	Gln	Leu	Ile	Cys
	465		470		475
Thr	Lys	Ile	Glu	Asn	Glu
	485		490		

<210> 2657

<211> 972

<212> DNA

<213> Homo sapiens

<400> 2657

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120
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180
gcgtcagatc agagttgcc tcttcaact gatatgcccc ccacatccca gcagctctgt
240
gggcccaggc tactggcatc cacatgactc ccagggcctg agtccacact gcctgaggac
300
aggagcctca aaactgaaat gcacgtgctt cggaccagcc atccgtgctt gacaatgtcc
360
tatggaaaaa cccacacgtg tgcagatcgc tgcaatgaaa gggtcctgca tggggttggg
420
taattccagc tgggaccgcc taggagcgcc atgcagctgt gggaacaagg ttgctgtcca
480
cacagacatg aagggattcc ccgtggaatg aggttagaaa aggaagggca agagtggagc
540
tataagatgc cccatgctgt gtgaaaactg ccatgagaga gagacggagg aagggggaga
600
aagtgggaga cagagaccaa catctgact gcctgtgcct gccacactct cccctcgggg
660
ccagaggggt gcctctgggg aggggctggc gagaggggat gccaggcctg ggctgcagca
720
gacttgggtg gtcattgagg atccatgcc tcaacggcag gctgggggtg cctccccggg
780
ccagaccaaa gcatgcatgg ttggtgatgt ggaacttacg cagagcgtgg cggctgggca
840
ggcggctgtg caggggctgg gcatggatat acagggctcg gtagaactcc tggcagtcct
900
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960
tggggttccg ga
972

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<210> 2658

<211> 76

<212> PRT

<213> Homo sapiens

<400> 2658

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Glu Arg Asp Gly Gly Arg Gly Arg Lys Trp Glu Thr Glu Thr Asn Ile
 1           5           10          15
Cys Thr Ala Cys Ala Cys His Thr Leu Pro Ser Gly Pro Glu Gly Gly
          20          25          30
Leu Trp Gly Gly Ala Gly Glu Arg Gly Cys Gln Ala Trp Ala Ala Ala
          35          40          45
Asp Leu Gly Gly His Gly Gly Ser Met Pro Ser Thr Ala Gly Trp Gly
          50          55          60
Ala Leu Pro Gly Pro Ala Pro Ser Met His Gly Trp
65           70           75

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<210> 2659

<211> 691

<212> DNA

<213> Homo sapiens

<400> 2659

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aattcatttt aagaattatt atgatctgaa tgtgaggctg aagaggaaca gaaaagaaag
120
aatggagaga acaccttcaa acgcattgga ccccgctgg agaagcctgt ggagaaggtg
180
cagaggggtg aggcctcccc gagggccgtt cgcgagaacc tgccacagcc acagatgcca
240
ccctatgcct tcgcgcaccc acccttcccc ctgcctcccc tgccgctctgt gttcaacaac
300
ttcccactca acatggggcc tatccagcc cgtacgtgc cccctctgcc caacgtgccc
360
gtcaactatg acttcggtcc catccacatg cccctggagc acaacctgcc catgcatttt
420
ggccccccag cgcggcatcg cttctgatgg ccccgaaacc ccattgagca gcacaaagcc
480
cgtttggggg aggagtggtg atggagaacc ctcccccaag gctggtgtct gtaccattgc
540
atcctaagtc agcttgaagg gttaggtggt tttcttccca ccccttctct agaagggtca
600
ctgctcctgg aagagtggac ggatccataa taaagacgtc ccaaatggtg aaaaaaaaaa
660
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a
691

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<210> 2660

<211> 120

<212> PRT

<213> Homo sapiens

<400> 2660

```

Ser Glu Cys Glu Ala Glu Glu Glu Gln Lys Arg Lys Asn Gly Glu Asn
 1           5           10          15
Thr Phe Lys Arg Ile Gly Pro Pro Leu Glu Lys Pro Val Glu Lys Val

```


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 1080
 gctatgaaaa tgcggcattt gaatgcaatg ggttttcatg tgatcttggt caataactgg
 1140
 gagatggaca aactagagat ggaagatgca gtcacatttt tgaagactaa aatctattca
 1200
 gtagaagctc ttctgtttgc tgctgtaaat gtgcaaagca cacaataaag tgaataatcaa
 1260
 ccttttcata ttaggagaca tgcatttgta aaaattaata aagatgacaa gtcagttgtc
 1320
 aatggaattg agctatctgc taagacaaaa aatgttacct cagttcacta ttaaaattaa
 1380
 ttttaggagt ggaaa
 1395

<210> 2662

<211> 415

<212> PRT

<213> Homo sapiens

<400> 2662

Leu	Val	Asp	Gln	Gln	Val	Trp	Lys	Ile	Glu	Asp	Val	Phe	Thr	Leu	Gln
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Val	Val	Met	Lys	Cys	Ile	Gly	Lys	Asp	Ala	Pro	Ile	Ala	Leu	Lys	Arg
			20					25					30		
Lys	Leu	Glu	Met	Lys	Ala	Leu	Arg	Glu	Leu	Asp	Arg	Phe	Ser	Val	Leu
		35				40						45			
Asn	Ser	Gln	His	Met	Phe	Glu	Val	Leu	Ala	Ala	Met	Asn	His	Arg	Ser
		50			55						60				
Leu	Ile	Leu	Leu	Asp	Glu	Cys	Ser	Lys	Val	Val	Leu	Asp	Asn	Ile	His
				70						75				80	
Gly	Cys	Pro	Leu	Arg	Ile	Met	Ile	Asn	Ile	Leu	Gln	Ser	Cys	Lys	Asp
			85					90						95	
Leu	Gln	Tyr	His	Asn	Leu	Asp	Leu	Phe	Lys	Gly	Leu	Ala	Asp	Tyr	Val
			100					105					110		
Ala	Ala	Thr	Phe	Asp	Ile	Trp	Lys	Phe	Arg	Lys	Val	Leu	Phe	Ile	Leu
			115				120					125			
Ile	Leu	Phe	Glu	Asn	Leu	Gly	Phe	Arg	Pro	Val	Gly	Leu	Met	Asp	Leu
			130			135					140				
Phe	Met	Lys	Arg	Ile	Val	Glu	Asp	Pro	Glu	Ser	Leu	Asn	Met	Lys	Asn
				150						155				160	
Ile	Leu	Ser	Ile	Leu	His	Thr	Tyr	Ser	Ser	Leu	Asn	His	Val	Tyr	Lys
				165				170						175	
Cys	Gln	Asn	Lys	Glu	Gln	Phe	Val	Glu	Val	Met	Ala	Ser	Ala	Leu	Thr
			180					185					190		
Gly	Tyr	Leu	His	Thr	Ile	Ser	Ser	Glu	Asn	Leu	Leu	Asp	Ala	Val	Tyr
			195				200					205			
Ser	Phe	Cys	Leu	Met	Asn	Tyr	Phe	Pro	Leu	Ala	Pro	Phe	Asn	Gln	Leu
			210			215					220				
Leu	Gln	Lys	Asp	Ile	Ile	Ser	Glu	Leu	Leu	Thr	Ser	Asp	Asp	Met	Lys
				230						235				240	
Asn	Ala	Tyr	Lys	Leu	His	Thr	Leu	Asp	Thr	Cys	Leu	Lys	Leu	Asp	Asp
				245				250						255	
Thr	Val	Tyr	Leu	Arg	Asp	Ile	Ala	Leu	Ser	Leu	Pro	Gln	Leu	Pro	Arg

260										265										270																											
Glu	Leu	Pro	Ser	Ser	His	Thr	Asn	Ala	Lys	Val	Ala	Glu	Val	Leu	Ser	Glu	Leu	Pro	Ser	Ser	His	Thr	Asn	Ala	Lys	Val	Ala	Glu	Val	Leu	Ser	Glu	Val	Leu	Ser	Ser	His	Thr	Asn	Ala	Lys	Val	Ala	Glu	Val	Leu	Ser
275										280										285																											
Ser	Leu	Leu	Gly	Gly	Glu	Gly	His	Phe	Ser	Lys	Asp	Val	His	Leu	Pro	Ser	Leu	Leu	Gly	Gly	Glu	Gly	His	Phe	Ser	Lys	Asp	Val	His	Leu	Pro	Ser	Leu	Leu	Gly	Gly	Glu	Gly	His	Phe	Ser	Lys	Asp	Val	His	Leu	Pro
290										295										300																											
His	Asn	Tyr	His	Ile	Asp	Phe	Glu	Ile	Arg	Met	Asp	Thr	Asn	Arg	Asn	His	Asn	Tyr	His	Ile	Asp	Phe	Glu	Ile	Arg	Met	Asp	Thr	Asn	Arg	Asn	His	Asn	Tyr	His	Ile	Asp	Phe	Glu	Ile	Arg	Met	Asp	Thr	Asn	Arg	Asn
305										310										315																											
Gln	Val	Leu	Pro	Leu	Ser	Asp	Val	Asp	Thr	Thr	Ser	Ala	Thr	Asp	Ile	Gln	Val	Leu	Pro	Leu	Ser	Asp	Val	Asp	Thr	Thr	Ser	Ala	Thr	Asp	Ile	Gln	Val	Leu	Pro	Leu	Ser	Asp	Val	Asp	Thr	Thr	Ser	Ala	Thr	Asp	Ile
320										325										330																											
Gln	Arg	Val	Ala	Val	Leu	Cys	Val	Ser	Arg	Ser	Ala	Tyr	Cys	Leu	Gly	Gln	Arg	Val	Ala	Val	Leu	Cys	Val	Ser	Arg	Ser	Ala	Tyr	Cys	Leu	Gly	Gln	Arg	Val	Ala	Val	Leu	Cys	Val	Ser	Arg	Ser	Ala	Tyr	Cys	Leu	Gly
335										340										345																											
Ser	Ser	His	Pro	Arg	Gly	Phe	Leu	Ala	Met	Lys	Met	Arg	His	Leu	Asn	Ser	Ser	His	Pro	Arg	Gly	Phe	Leu	Ala	Met	Lys	Met	Arg	His	Leu	Asn	Ser	Ser	His	Pro	Arg	Gly	Phe	Leu	Ala	Met	Lys	Met	Arg	His	Leu	Asn
350										355										360																											
Ala	Met	Gly	Phe	His	Val	Ile	Leu	Val	Asn	Asn	Trp	Glu	Met	Asp	Lys	Ala	Met	Gly	Phe	His	Val	Ile	Leu	Val	Asn	Asn	Trp	Glu	Met	Asp	Lys	Ala	Met	Gly	Phe	His	Val	Ile	Leu	Val	Asn	Asn	Trp	Glu	Met	Asp	Lys
370										375										380																											
Leu	Glu	Met	Glu	Asp	Ala	Val	Thr	Phe	Leu	Lys	Thr	Lys	Ile	Tyr	Ser	Leu	Glu	Met	Glu	Asp	Ala	Val	Thr	Phe	Leu	Lys	Thr	Lys	Ile	Tyr	Ser	Leu	Glu	Met	Glu	Asp	Ala	Val	Thr	Phe	Leu	Lys	Thr	Lys	Ile	Tyr	Ser
385										390										395																											
Val	Glu	Ala	Leu	Pro	Val	Ala	Ala	Val	Asn	Val	Gln	Ser	Thr	Gln		Val	Glu	Ala	Leu	Pro	Val	Ala	Ala	Val	Asn	Val	Gln	Ser	Thr	Gln		Val	Glu	Ala	Leu	Pro	Val	Ala	Ala	Val	Asn	Val	Gln	Ser	Thr	Gln	
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<210> 2663

<211> 1024

<212> DNA

<213> Homo sapiens

<400> 2663

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180	ctcggcaata	ttgattttag	acaggcagac	ttctgcgtta	tgaccgccct	gctggggctac
240	gtggagcccc	tgatcccag	ctttgtggct	gccgtcatca	ccatcacctt	caatccgctc
300	tactggaatg	tgtgtgcacg	atgggaacac	aagaccgcga	agctgagcag	ggccttcgga
360	tccccctacc	tggcctgcta	ctctctaagc	gtcaccatcc	tgtctctgaa	cttctgcgcg
420	tcgcactagt	tcaacgagcg	catgctgagc	cagcccagga	tggagagcct	ggacaccccc
480	gcggcctaca	gctctgggct	cgcgcctcct	ggactggggc	tcgtgctcgt	gctctccacg
540	ttctttgcac	tggggttcgc	tggaaacttc	ctaggtgatt	acttcgggat	cctcaaggag
600	gcgagagtga	ccgtgttccc	cttcaacatc	ctggacaacc	ccatgtactg	gggaagcaca
660	gccaactacc	tgggctgggc	catcatgcac	gccagcccca	cgggcctgct	cctgacgggtg
720	ctggtggccc	tcacctacat	aatggctctc	ctatacgaag	agcccttcac	cgctgagatc
780	taccggcgag	aagcctccgg	gtcccacaag	aggagctgat	tgagctgcaa	cagctttgct
840	gaagccctgg	ccagcctccc	tcgtgcccca	agtggcagcg	cctgcgcagg	gcgagaatgg

tgctgtgtgc tcaggggctc ccccggtgtg ggctgccccca gtgccttgga acctgtgtgc
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 960
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 1020
 aaaa
 1024

<210> 2664
 <211> 199
 <212> PRT
 <213> Homo sapiens

<400> 2664
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 Ala Arg Trp Glu His Lys Thr Arg Lys Leu Ser Arg Ala Phe Gly Ser
 35 40 45
 Pro Tyr Leu Ala Cys Tyr Ser Leu Ser Val Thr Ile Leu Leu Leu Asn
 50 55 60
 Phe Leu Arg Ser His Cys Phe Thr Gln Ala Met Leu Ser Gln Pro Arg
 65 70 75 80
 Met Glu Ser Leu Asp Thr Pro Ala Ala Tyr Ser Leu Gly Leu Ala Leu
 85 90 95
 Leu Gly Leu Gly Val Val Leu Val Leu Ser Ser Phe Phe Ala Leu Gly
 100 105 110
 Phe Ala Gly Thr Phe Leu Gly Asp Tyr Phe Gly Ile Leu Lys Glu Ala
 115 120 125
 Arg Val Thr Val Phe Pro Phe Asn Ile Leu Asp Asn Pro Met Tyr Trp
 130 135 140
 Gly Ser Thr Ala Asn Tyr Leu Gly Trp Ala Ile Met His Ala Ser Pro
 145 150 155 160
 Thr Gly Leu Leu Leu Thr Val Leu Val Ala Leu Thr Tyr Ile Met Ala
 165 170 175
 Leu Leu Tyr Glu Glu Pro Phe Thr Ala Glu Ile Tyr Arg Gln Lys Ala
 180 185 190
 Ser Gly Ser His Lys Arg Ser
 195

<210> 2665
 <211> 720
 <212> DNA
 <213> Homo sapiens

<400> 2665
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 120
 gcgccaatgc gaagcgttgc agtcgcttga ctcacctgag gctctccaag gataacctta
 180

atgcctgcac tgtaaggagg ctgcttttcc cgggtgctgg cgagaacgga agccttctt
 240
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 300
 caaattactt atgaagtttg tcaggtcaac ggcagagact tatccagagc aactcatgat
 360
 caggctgtgg aagctttcaa gacagccaag gagcccatag tgggtgacggt gttgagaaga
 420
 acaccaagga ccaaatgtt cagcctcca tcagagtctc agctgggtgga cacgggaaac
 480
 caaaccgaca tcacctttga acatatcatg gccctcacta agatgtcctc tcccagccca
 540
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 ccaaatgact acattggaga catccatcag gagatggaca gggaggagct ggagctggag
 660
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 720

<210> 2666

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2666

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Tyr	Glu	Val	Cys	Gln	Val	Asn	Gly	Arg	Asp	Leu	Ser	Arg	Ala	Thr	His
			20					25					30		
Asp	Gln	Ala	Val	Glu	Ala	Phe	Lys	Thr	Ala	Lys	Glu	Pro	Ile	Val	Val
			35					40				45			
Gln	Val	Leu	Arg	Arg	Thr	Pro	Arg	Thr	Lys	Met	Phe	Thr	Pro	Pro	Ser
			50			55					60				
Glu	Ser	Gln	Leu	Val	Asp	Thr	Gly	Thr	Gln	Thr	Asp	Ile	Thr	Phe	Glu
			65			70				75				80	
His	Ile	Met	Ala	Leu	Thr	Lys	Met	Ser	Ser	Pro	Ser	Pro	Pro	Val	Leu
			85					90						95	
Asp	Pro	Tyr	Leu	Leu	Pro	Glu	Glu	His	Pro	Ser	Ala	His	Glu	Tyr	Tyr
			100					105					110		
Asp	Pro	Asn	Asp	Tyr	Ile	Gly	Asp	Ile	His	Gln	Glu	Met	Asp	Arg	Glu
			115				120					125			
Glu	Leu	Glu	Leu	Glu	Glu	Val	Asp	Leu	Tyr	Arg	Met	Asn	Ser	Gln	Asp
			130			135					140				
Lys	Leu	Gly	Leu	Thr	Val	Cys	Tyr	Arg							
145						150									

<210> 2667

<211> 289

<212> DNA

<213> Homo sapiens

<400> 2667

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gccagagacg cggaacaatt gagcaagaac aagggggaacc cttttctctgt ttgtccccga
 120
 tgggtgccag gcctatgttg gaggacaaga catttcaaag aaagtattaa attcattcac
 180
 gaggcgccgc tccgcgggga gagctgcctt gtacactgcc tggccgggggt ctccaggagc
 240
 gtgacactgg tgatcgcata catcatgacc gtcactgact ttggctggg
 289

<210> 2668

<211> 96

<212> PRT

<213> Homo sapiens

<400> 2668

Xaa	Met	Gly	Asn	Gly	Met	Asn	Lys	Ile	Leu	Pro	Gly	Leu	Tyr	Ile	Gly
1			5						10					15	
Asn	Phe	Lys	Asp	Ala	Arg	Asp	Ala	Glu	Gln	Leu	Ser	Lys	Asn	Lys	Gly
			20					25					30		
Asn	Pro	Phe	Ser	Val	Cys	Pro	Arg	Trp	Val	Pro	Gly	Leu	Cys	Trp	Arg
			35					40					45		
Thr	Arg	His	Phe	Lys	Glu	Ser	Ile	Lys	Phe	Ile	His	Glu	Cys	Arg	Leu
			50				55				60				
Arg	Gly	Glu	Ser	Cys	Leu	Val	His	Cys	Leu	Ala	Gly	Val	Ser	Arg	Ser
					70					75				80	
Val	Thr	Leu	Val	Ile	Ala	Tyr	Ile	Met	Thr	Val	Thr	Asp	Phe	Gly	Trp
					85					90				95	

<210> 2669

<211> 4285

<212> DNA

<213> Homo sapiens

<400> 2669

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 120
 gatctggcga cctcgggcgc gcgcctaaga ggtcagactg cggagcctgc gggtcgccag
 180
 cggccccgcc gagagccgga ggcaatggat gaacagagcg tggagagcat tgctgagggt
 240
 ttccgattgt tcatttgtat ggagaaattg cgggatgcac gcctgtgtcc tcattgtccc
 300
 aaactgtgtt gtttcagctg tattaggcgc tggctgacag agcagagagc tcaatgtcct
 360
 cattgcctgt ctccactcca gctacgagaa ctagttaaatt gtcgttgggc agaagaagta
 420
 acacaacagc ttgatactct tcaactctgc agtctcacca aacatgaaga aaatgaaaag
 480
 gacaaatgtg aaaatcacca tgaaaaactt agtgtatttt gctggactgt taagaagtgt
 540
 atctgccatc agtgtgcact ttggggagga atgcatggcg gacatacctt taaacctttg
 600

gcagaaattt atgagcaaca cgtcactaaa gtgaatgaag aggtagccaa acttcgtcgg
660
cgtctcatgg aactgatcag cttagttcaa gaagtggaaa ggaatgtaga agctgtaaga
720
aatgcaaaa atgagcgtgt tcgggaaatt aggaatgcag tggagatgat gattgcacgg
780
ttagacacac agctgaagaa taagcttata aactgatgg gtcagaagac atctctaacc
840
caagaacac agcttttggg atccttactt caggaggtgg agcaccagtt gcggtcttgt
900
agtaagagt agttgatatc taagagctca gagatcctta tgatgtttca gcaagtccat
960
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1020
gtgccatctt acgattcagc tacttttgtt ttagagaatt tcagcacttt gcgtcagaga
1080
gcagatcctt ttacagtc acctcttcaa gtttcaggac tttgctggag gttaaaagtt
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<212> PRT

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gggggaagga ggtgggcacg gggggcatgg ggccctggcc ctggccgtgc atcctcactc
4320
ccaccgcctc ccagcagccc tctgtcggcc tcctcccagc ttgactcacc gtcacctgga
4380
agcaggggcag cagctgctgg ggtgggactt gggtcttcag atcataaact acgtattccc
4440
tcttgacact cacaatctcg ttcaccacgt gggcctggaa ctctaactcc atcgtgagg
4500
ggtgggaatg agaactatga accaggaagg agagatccca gctgccaaagt ctgggggtag
4560
cagactggag cccaggggtg atggagactt ttgatggcct ttggcaggga cagacttgga
4620

cacaaaaaccg atccatagaa gggcttccca aaccttggtt tgcaacatcc caaattgtct
 4680
 ccagttgaag gaaggcccttt atcagattca tagatgagct ttcattgtaa aaataaatgt
 4740
 actttgcacc acttcatgat ggagggagaa gtggtcacag gtcgtcagt ctatcatctc
 4800
 acagctgaag caggatcccc agggctaccg ctgtggcttc tcattggaggg aagggtagga
 4860
 cttctctgcc aagtttagat tcacctgatg gggtttatata ggggtggctgc accttcagggt
 4920
 gggtttccagg agtgaggcca tggcaacctg agcctctggc cttgctgcaa ggggccgagc
 4980
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 5035

<210> 2674

<211> 690

<212> PRT

<213> Homo sapiens

<400> 2674

Ala	Ala	Gly	Phe	Arg	Ala	Met	Ile	Pro	Pro	Gln	Glu	Ala	Ser	Ala	Arg
1				5				10						15	
Arg	Arg	Glu	Ile	Glu	Asp	Lys	Leu	Lys	Gln	Glu	Glu	Glu	Thr	Leu	Ser
		20					25						30		
Phe	Ile	Arg	Asp	Ser	Leu	Glu	Lys	Ser	Asp	Gln	Leu	Thr	Lys	Asn	Met
		35					40					45			
Val	Ser	Ile	Leu	Ser	Ser	Phe	Glu	Ser	Arg	Leu	Met	Lys	Leu	Glu	Asn
	50					55				60					
Ser	Ile	Ile	Pro	Val	His	Lys	Gln	Thr	Glu	Asn	Leu	Gln	Arg	Leu	Gln
	65				70				75					80	
Glu	Asn	Val	Glu	Lys	Thr	Leu	Ser	Cys	Leu	Asp	His	Val	Ile	Ser	Tyr
			85					90					95		
Tyr	His	Val	Ala	Ser	Asp	Thr	Glu	Lys	Ile	Arg	Glu	Gly	Pro	Thr	
		100					105					110			
Gly	Arg	Leu	Glu	Glu	Tyr	Leu	Gly	Ser	Met	Ala	Lys	Ile	Gln	Lys	Ala
		115				120						125			
Val	Glu	Tyr	Phe	Gln	Asp	Asn	Ser	Pro	Asp	Ser	Pro	Glu	Leu	Asn	Lys
	130				135					140					
Val	Lys	Leu	Leu	Phe	Glu	Arg	Gly	Lys	Glu	Ala	Leu	Glu	Ser	Glu	Phe
	145			150					155					160	
Arg	Ser	Leu	Met	Thr	Arg	His	Ser	Lys	Val	Val	Ser	Pro	Val	Leu	Ile
			165					170						175	
Leu	Asp	Leu	Ile	Ser	Gly	Asp	Asp	Asp	Leu	Glu	Ala	Gln	Glu	Asp	Val
		180				185							190		
Thr	Leu	Glu	His	Leu	Pro	Glu	Ser	Val	Leu	Gln	Asp	Val	Ile	Arg	Ile
	195				200							205			
Ser	Arg	Trp	Leu	Val	Glu	Tyr	Gly	Arg	Asn	Gln	Asp	Phe	Met	Asn	Val
	210				215						220				
Tyr	Tyr	Gln	Ile	Arg	Ser	Ser	Gln	Leu	Asp	Arg	Ser	Ile	Lys	Gly	Leu
	225			230					235					240	
Lys	Glu	His	Phe	His	Lys	Ser	Ser	Ser	Ser	Ser	Gly	Val	Pro	Tyr	Ser
		245						250						255	
Pro	Ala	Ile	Pro	Asn	Lys	Arg	Lys	Asp	Thr	Pro	Thr	Lys	Lys	Pro	Val

[illegible]

690

<210> 2675

<211> 711

<212> DNA

<213> Homo sapiens

<400> 2675

agatctcagtg gaagaggacc cttgttccact gtacctcatc aacttctctc tggacgccac
 60
 tgtgggcatg ctgctcatct acgtgggggt gcgcgccgtc agcgtcctgg tagagtggca
 120
 gcagtgggag tccttcgctc tcggcgaata tggagacctc ctgcagtgtg gagcctgggt
 180
 cgggcagctg gctctttaca tcgtgatcat gatttttgaa aagtctgtcg tcttcacgtg
 240
 cctcctccta ctccagtggg aaaaggtggc cctattgaat ccaattgaaa accccgacct
 300
 gaagctgggc atcgctcatgc tgatcgctcc cttctttgtc aacgctttga tgttttgggt
 360
 agtggacaat ttctcatga gaaaggggaa gacgaaagct aagctagaag aaagggggagc
 420
 caaccaggag tcgaggaatg ggagcaaggt ccgctaccgg agggccgcat cccacgagga
 480
 gtctgagctc gagatcctga tctcagcggg tgatgagatg gaggagtcgg acgtggagga
 540
 ggacctccgc agactgacct cctcaagcc tgtgaagaaa aagaagcacc gctttgggct
 600
 acccgataga cacattccca tgctgggggt gacgggaggg ccccgccagc cgctggtgtg
 660
 cagaggatcat cccacagcat cgttctctac cctctctctg ccttcaccc g
 711

<210> 2676

<211> 180

<212> PRT

<213> Homo sapiens

<400> 2676

Met Leu Leu Ile Tyr Val Gly Val Arg Ala Val Ser Val Leu Val Glu
 1 5 10 15
 Trp Gln Gln Trp Glu Ser Leu Arg Phe Gly Glu Tyr Gly Asp Pro Leu
 20 25 30
 Gln Cys Gly Ala Trp Val Gly Gln Cys Ala Leu Tyr Ile Val Ile Met
 35 40 45
 Ile Phe Glu Lys Ser Val Val Phe Ile Val Leu Leu Leu Gln Trp
 50 55 60
 Lys Lys Val Ala Leu Leu Asn Pro Ile Glu Asn Pro Asp Leu Lys Leu
 65 70 75 80
 Ala Ile Val Met Leu Ile Val Pro Phe Phe Val Asn Ala Leu Met Phe
 85 90 95
 Trp Val Val Asp Asn Phe Leu Met Arg Lys Gly Lys Thr Lys Ala Lys
 100 105 110
 Leu Glu Glu Arg Gly Ala Asn Gln Asp Ser Arg Asn Gly Ser Lys Val

	115		120		125	
Arg	Tyr	Arg	Arg	Ala	Ala	Ser
	130		135		140	
Ile	Ser	Ala	Asp	Asp	Glu	Met
	145		150		155	
Arg	Arg	Leu	Thr	Pro	Leu	Lys
			165		170	
Gly	Leu	Pro	Val			
			180			

<210> 2677

<211> 735

<212> DNA

<213> Homo sapiens

<400> 2677

ngcgcgccag gaccgctcct gcaccgaggg tgcccgcgcg gctatggagg ccttccagag
 60
 ggccgctggt gagggcggcc cgggccgcgg tggggcacgg cgcggtgccca ggggttgca
 120
 gagccccctt tgcagggcag gagctgggga gtggttagga catcagtccc tcaggtaggg
 180
 ggagtggaga catcaggctc atatgtgtcc caggagcatc cctagctggc cggcctgagt
 240
 gctgcctggg gcagagatgg gcaggtacac ggcctgcct gtgtgagcac cctccctcc
 300
 gctggggcct tcagcctcct gagggagaac ttctcccatg cgccgagccc agacatgagc
 360
 gctgcgtccc tctgcgcact ggagcagctc atgatggccc agggccagga atgtgtgttt
 420
 gagggcctct caccacctgc ctccatggcc cccaagact gctgggcca gctgcgctg
 480
 gcgcaggagg ccgcccaggt gagctcgggc acccgtgtca ggatgcaggg ggtggggccg
 540
 agctggggtc agagcccagg tccaggcatg cgtgagctct cccacctcct tccttgtgtg
 600
 tcagccccga gccagctgtt gtccctgtcc ctgggggggc tggtcaggaa cctgggggacc
 660
 cgagcctctg cctccaggga atggcacaaa gcagcaggaa ctgaggtgcc agggaggctg
 720
 ctgggatggt ggtcg
 735

<210> 2678

<211> 170

<212> PRT

<213> Homo sapiens

<400> 2678

Leu	Ala	Ala	Leu	Ser	Ala	Ala	Trp	Gly	Arg	Asp	Gly	Gln	Val	His	Gly
	1				5				10					15	
Pro	Ala	Cys	Val	Ser	Thr	Pro	Pro	Ser	Ala	Gly	Ala	Phe	Ser	Leu	Leu
			20					25					30		
Arg	Glu	Asn	Phe	Ser	His	Ala	Pro	Ser	Pro	Asp	Met	Ser	Ala	Ala	Ser

```

      35              40              45
Leu Cys Ala Leu Glu Gln Leu Met Met Ala Gln Ala Gln Glu Cys Val
  50              55              60
Phe Glu Gly Leu Ser Pro Pro Ala Ser Met Ala Pro Gln Asp Cys Leu
  65              70              75              80
Ala Gln Leu Arg Leu Ala Gln Glu Ala Ala Gln Val Ser Ser Gly Thr
      85              90              95
Arg Val Arg Met Gln Gly Val Gly Pro Ser Trp Gly Gln Ser Pro Gly
      100              105              110
Pro Gly Met Arg Glu Leu Ser His Leu Leu Pro Cys Val Ser Ala Pro
      115              120              125
Ser Gln Leu Leu Ser Cys Ser Leu Gly Gly Leu Val Arg Asn Leu Gly
      130              135              140
Thr Arg Ala Ser Ala Ser Arg Glu Trp His Lys Ala Ala Gly Thr Glu
      145              150              155              160
Val Pro Gly Arg Leu Leu Gly Trp Trp Ser
      165              170

```

<210> 2679

<211> 560

<212> DNA

<213> Homo sapiens

<400> 2679

```

agccgcccc cctcctgttc cattataatc ttatttttggc tatgttgata caacacaatc
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tgtccttcca agtgatcacc ggagtcacaga tatttctgtc aagtcagcca accaggaagg
  120
ggctgcagac aaagtgcggc aacagggact ccaccaggcc atggagctca tcccacaaga
  180
cgccctcaccg cacaggaggg ctgaccccag ggaaacgtgt caccaggaca cagcacgaag
  240
ctcaaaaaggg gctagcatgc tctgtgcagc tgccagactc tgccctgaag aatcacaggg
  300
cactctagtg agcgctgcag cagccagcag gccctggatg gccaggtgtg cagtggggag
  360
gcacaggggg tgcaccagga cgcagccaga cctggggcag ttgcgcgccga ctcttttcca
  420
ttccagaggt ccaggaagca cctgtcaatg tggaagtcag aatgctcagg ccaaataccg
  480
agatcaacta actattcagg ttgaaccaga ggcctggggc ggggcatcca actgcccacc
  540
cgtcagactg agggacgcgt
  560

```

<210> 2680

<211> 133

<212> PRT

<213> Homo sapiens

<400> 2680

```

Met Glu Leu Ile Pro Gln Asp Ala Ser Pro His Arg Arg Ala Asp Pro
  1              5              10              15
Arg Glu Thr Cys His Gln Asp Thr Ala Arg Ser Ser Lys Gly Ala Ser

```

```

                20                25                30
Met Leu Cys Ala Ala Ala Arg Leu Cys Pro Glu Glu Ser Gln Gly Thr
   35                40                45
Leu Val Ser Ala Ala Ala Ala Ser Arg Pro Trp Met Ala Arg Cys Ala
   50                55                60
Val Gly Arg His Arg Gly Cys Thr Arg Thr Gln Pro Asp Leu Gly Gln
   65                70                75                80
Phe Ala Pro Thr Leu Leu His Ser Arg Gly Pro Gly Ser Thr Cys Gln
   85                90                95
Cys Gly Ser Gln Asn Ala Gln Ala Lys Tyr Arg Asp Gln Leu Thr Ile
  100                105                110
Gln Val Glu Pro Glu Ala Trp Ala Gly Ala Ser Asn Cys Pro Pro Val
  115                120                125
Arg Leu Arg Asp Ala
  130

```

<210> 2681

<211> 585

<212> DNA

<213> Homo sapiens

<400> 2681

```

gattctctag tagccctaata tctacccatc tggctactaa ttcaaaacttt ctctcttcac
60
atctgtttgt ggactttctcc aatataacta gtatgctctg gctcattctg ctctctctct
120
tctggaatag tttatttcat gaccatgtgc agaggggggtg atgggggcaag cctcacaagc
180
cccgagggtc tgtggctgag gtgtaccttg gctttgttgc ctggaactgc tctgactctg
240
ctcttcgctc ttctctgggc tgtgtcacta cagctctgac tcctttccac ctggagttt
300
agcttccctg ccaggaaagc taaggagtag gagttgttct tggaacacaa tgccgagcga
360
tgtgtctgtg tcatctggcc tcgagaaggt tcttcattct ctgaacttga gagacgtgca
420
ggacaacggt ccagatttgt ttctagtact aatggttcat ctcttttttt ctgttcatcc
480
attttctctt tcctgttttc tgtatcctct ggtaacagct tgtggatttg atcttcagag
540
ggtttttctc ctgttaactt ttcttctctc agctttctca agctt
585

```

<210> 2682

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2682

```

Met Asp Glu Gln Lys Lys Arg Asp Glu Pro Leu Val Leu Lys Thr Asn
  1                5                10                15
Leu Glu Arg Cys Pro Ala Arg Leu Ser Asp Ser Glu Asn Glu Glu Pro
  20                25                30
Ser Arg Gly Gln Met Thr Gln Thr His Arg Ser Ala Phe Val Ser Lys

```

```

          35              40              45
Asn Asn Ser Tyr Ser Leu Ala Phe Leu Ala Gly Lys Leu Asn Ser Lys
  50              55              60
Val Glu Arg Ser Gln Ser Cys Ser Asp Thr Ala Gln Glu Arg Ala Lys
  65              70              75              80
Ser Arg Val Arg Ala Val Pro Gly Asn Lys Ala Lys Val His Leu Ser
          85              90              95
His Arg Pro Pro Gly Leu Val Arg Leu Ala Pro Ser Pro Pro Leu His
          100              105              110
Met Val Met Met Lys
          115

```

<210> 2683

<211> 498

<212> DNA

<213> Homo sapiens

<400> 2683

```

nagcggttac actgactcca aaactctcct tgggtggccta ggtgaaacct catggccaac
  60
atcacctgga tggccaacca cactggaagg ttggatttca tcctcatggg actcttcaga
  120
cgatccaaac atccagctct acttagtggt gtcactcttg tggttttcct gatggcggtg
  180
tctgaaaaatg ctgtcctgat ctttctgata cactgtgaca cctacctcca caccctcatg
  240
tactttttca tcagtcaatt gtctctcatg gacatggcgt acatttctgt cactgtgcc
  300
aagatgtccc tggaccaggt catgggtgtg aataagatct cagcccctga gtgtgggatg
  360
cagatgttcc tctatctgac actagcaggt tcggaatttt tccttctagc caccatggcc
  420
tatgaccgct acgtggccat ctgccatcct ctccgttacc ctgtcctcat gaacctaggt
  480
gtctgtcttt tcctggca
  498

```

<210> 2684

<211> 149

<212> PRT

<213> Homo sapiens

<400> 2684

```

Met Ala Asn Ile Thr Trp Met Ala Asn His Thr Gly Arg Leu Asp Phe
  1              5              10              15
Ile Leu Met Gly Leu Phe Arg Arg Ser Lys His Pro Ala Leu Leu Ser
          20              25              30
Val Val Ile Phe Val Val Phe Leu Met Ala Leu Ser Glu Asn Ala Val
          35              40              45
Leu Ile Leu Leu Ile His Cys Asp Thr Tyr Leu His Thr Pro Met Tyr
          50              55              60
Phe Phe Ile Ser Gln Leu Ser Leu Met Asp Met Ala Tyr Ile Ser Val
  65              70              75              80
Thr Val Pro Lys Met Leu Leu Asp Gln Val Met Gly Val Asn Lys Ile

```

```

      85              90              95
Ser Ala Pro Glu Cys Gly Met Gln Met Phe Leu Tyr Leu Thr Leu Ala
      100              105              110
Gly Ser Glu Phe Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Tyr Val
      115              120              125
Ala Ile Cys His Pro Leu Arg Tyr Pro Val Leu Met Asn His Arg Val
      130              135              140
Cys Leu Phe Leu Ala
145

```

```

<210> 2685
<211> 391
<212> DNA
<213> Homo sapiens

```

```

<400> 2685
ngccggctgc acacgctgcc acctgggctg cctcgaaatg tccatgtgct gaaggtcaag
60
cgcaatgagc tggctgccct ggcaagaggg gcgctggcgg gcattggctca gcttcgggaa
120
ctctacctca caggcaaccg actgcgaagc cgggccctgg gccccctgct ctgggtggac
180
ctcgcccatc tgcagttgct ggacatcgcc gggaatcagc tcacagagat cccggagggg
240
ctccccccat cgctggagta tctgtacctg cagaataaca agattagcgc tgttctctgc
300
agcgcccttg actctactcc caacctcaag gggatctttc tcaggttcaa caagctggct
360
gtgggctccg tagtagaaag cgccttccgg a
391

```

```

<210> 2686
<211> 130
<212> PRT
<213> Homo sapiens

```

```

<400> 2686
Xaa Arg Leu His Thr Leu Pro Pro Gly Leu Pro Arg Asn Val His Val
1      5      10      15
Leu Lys Val Lys Arg Asn Glu Leu Ala Ala Leu Ala Arg Gly Ala Leu
20      25      30
Ala Gly Met Ala Gln Leu Arg Glu Leu Tyr Leu Thr Gly Asn Arg Leu
35      40      45
Arg Ser Arg Ala Leu Gly Pro Arg Ala Trp Val Asp Leu Ala His Leu
50      55      60
Gln Leu Leu Asp Ile Ala Gly Asn Gln Leu Thr Glu Ile Pro Glu Gly
65      70      75      80
Leu Pro Pro Ser Leu Glu Tyr Leu Tyr Leu Gln Asn Asn Lys Ile Ser
85      90      95
Ala Val Pro Ala Ser Ala Phe Asp Ser Thr Pro Asn Leu Lys Gly Ile
100      105      110
Phe Leu Arg Phe Asn Lys Leu Ala Val Gly Ser Val Val Glu Ser Ala
115      120      125
Phe Arg

```

130

<210> 2687

<211> 399

<212> DNA

<213> Homo sapiens

<400> 2687

nagtgcaaga aatgtttaat acaagagatt gaaccctacc aaaatgggag gtttagcctc
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 caggaatggg agtgcaataa atctctaata caagagattg agcctcacca acctccagga
 120
 tgggaaatga caggttaagac agggactaca aaagaccaag cagacaataa aattccccct
 180
 gacagtcctgc taggccttat gttaagatac cggaagata atgaaaggac caaacacaag
 240
 aaaagacagc aaatgataaa atattgctgg ttattttgga ctaaggaacc catcctgaaa
 300
 cctttggctct tttagccaca gttagggttg agcggggact ggatatgcca actcctaact
 360
 cagtatgtaa aggataaaaag tccagtttct caagaggag
 399

<210> 2688

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2688

Met	Thr	Gly	Lys	Thr	Gly	Thr	Thr	Lys	Asp	Gln	Ala	Asp	Asn	Lys	Ile
1			5						10				15		
Pro	Pro	Asp	Ser	Pro	Leu	Gly	Leu	Met	Leu	Arg	Tyr	Arg	Lys	Asp	Asn
			20					25					30		
Glu	Arg	Thr	Lys	His	Lys	Lys	Arg	Gln	Gln	Met	Ile	Lys	Tyr	Cys	Trp
			35				40					45			
Phe	Ile	Trp	Thr	Lys	Glu	Pro	Ile	Leu	Lys	Pro	Leu	Val	Phe	Trp	Pro
			50			55				60					
Gln	Leu	Gly	Leu	Ser	Gly	Asp	Trp	Ile	Cys	Gln	Leu	Leu	Ile	Gln	Tyr
65					70				75					80	
Val	Lys	Asp	Lys	Ser	Pro	Val	Ser	Gln	Glu	Glu					
			85						90						

<210> 2689

<211> 560

<212> DNA

<213> Homo sapiens

<400> 2689

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 60
 gccctgtttc ctcagaaaag atacaaaaat gtgggtctca ccaagttgcc caggctggtc
 120
 tcaaaactct ggcctcaaga aatcctcctg gttagcctc acaaagctcc gagattacag
 180

ttgcatgtct gtgacaagct tggaggccga gttgcaagct aagatccaag agagccatcc
 240
 tgaattgcga cgcgtgtact tcaataaggg attgtaaagc agggaggaaa cctctgcagc
 300
 tcattctgcc actgcaaagc tgggtgtagcc atgctgggtga gaaaaatcct gttcaacctg
 360
 ggttggtata tcgtctttga aaaacaatga ctataaaagc tacaggaaa gtttttcagg
 420
 acgtttattg aaggcattgg tggagctctc tgtatgtgtt ttgctctgca gggaaactcaa
 480
 agttggcatt cccgtcacgg atgagaatgg gaaccgcttg ggggagtcgg cgaacgctgc
 540
 gaaacaagcc atcacgccag
 560

<210> 2690

<211> 73

<212> PRT

<213> Homo sapiens

<400> 2690

Ala	Pro	Ile	Gln	Val	Gly	Leu	Val	Gly	Phe	Cys	Leu	Val	Phe	Ala	Thr
1			5					10					15		
Pro	Leu	Cys	Cys	Ala	Leu	Phe	Pro	Gln	Lys	Arg	Tyr	Lys	Asn	Val	Gly
			20					25					30		
Leu	Thr	Lys	Leu	Pro	Arg	Leu	Val	Ser	Asn	Ser	Trp	Pro	Gln	Glu	Ile
			35					40					45		
Leu	Leu	Val	Gln	Pro	His	Lys	Ala	Pro	Arg	Leu	Gln	Leu	His	Val	Cys
	50					55					60				
Asp	Lys	Leu	Gly	Gly	Arg	Val	Ala	Ser							
65						70									

<210> 2691

<211> 532

<212> DNA

<213> Homo sapiens

<400> 2691

gatccatct gtacacactt catggatggc atgaatgagc tggcgattgc ttacatcctg
 60
 caggggggtgc tgaaggccct cgactacatc caccacatgg gatattgtaca caggagtgtc
 120
 aaagccagcc acatcctgat ctctgtggat ggggaagtct acctgtctgg tttgcgcagc
 180
 aacctcagca tgataagcca tgggcagcgg cagcgagtgg tccacgattt tcccaagtc
 240
 agtgtaagg ttctgccgtg gctcagcccc gaggtctctc agcagaatct ccagggttat
 300
 gatgccaaat ctgacatcta cagtgtggga atcacagcct gtgaactggc caacggccat
 360
 gtccccctta aggatatgcc tgcccaccag atgctgctag agaaactgaa cggcacagtg
 420
 cctgcctgt tggataccag caccatcccc gctgaggagc tgaccatgag cccttcgcgc
 480

tcagtggcca actctggcct gaggacagc ctgaccacca gcacaccccg gg
532

<210> 2692

<211> 177

<212> PRT

<213> Homo sapiens

<400> 2692

Asp	Leu	Ile	Cys	Thr	His	Phe	Met	Asp	Gly	Met	Asn	Glu	Leu	Ala	Ile
1			5						10				15		
Ala	Tyr	Ile	Leu	Gln	Gly	Val	Leu	Lys	Ala	Leu	Asp	Tyr	Ile	His	His
		20						25				30			
Met	Gly	Tyr	Val	His	Arg	Ser	Val	Lys	Ala	Ser	His	Ile	Leu	Ile	Ser
		35				40					45				
Val	Asp	Gly	Lys	Val	Tyr	Leu	Ser	Gly	Leu	Arg	Ser	Asn	Leu	Ser	Met
	50				55					60					
Ile	Ser	His	Gly	Gln	Arg	Gln	Arg	Val	Val	His	Asp	Phe	Pro	Lys	Tyr
65				70					75				80		
Ser	Val	Lys	Val	Leu	Pro	Trp	Leu	Ser	Pro	Glu	Val	Leu	Gln	Gln	Asn
		85						90					95		
Leu	Gln	Gly	Tyr	Asp	Ala	Lys	Ser	Asp	Ile	Tyr	Ser	Val	Gly	Ile	Thr
		100						105				110			
Ala	Cys	Glu	Leu	Ala	Asn	Gly	His	Val	Pro	Phe	Lys	Asp	Met	Pro	Ala
		115				120						125			
Thr	Gln	Met	Leu	Leu	Glu	Lys	Leu	Asn	Gly	Thr	Val	Pro	Cys	Leu	Leu
	130					135				140					
Asp	Thr	Ser	Thr	Ile	Pro	Ala	Glu	Glu	Leu	Thr	Met	Ser	Pro	Ser	Arg
145				150					155					160	
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Arg

<210> 2693

<211> 798

<212> DNA

<213> Homo sapiens

<400> 2693

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120
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420

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<210> 2694

<211> 266

<212> PRT

<213> Homo sapiens

<400> 2694

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Ile	Lys	Ala	Ile	Pro	Glu	Lys	Ala	Phe	Met	Gly	Asn	Pro	Leu	Leu	Gln
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Thr	Ile	His	Phe	Tyr	Asp	Asn	Pro	Ile	Gln	Phe	Val	Gly	Arg	Ser	Ala
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Phe	Gln	Tyr	Leu	Pro	Lys	Leu	His	Thr	Leu	Ser	Leu	Asn	Gly	Ala	Met
		100						105					110		
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Leu	Thr	Leu	Thr	Arg	Ala	Gly	Ile	Arg	Leu	Leu	Pro	Ser	Gly	Met	Cys
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Gln	Gln	Leu	Pro	Arg	Leu	Arg	Val	Leu	Glu	Leu	Ser	His	Asn	Gln	Ile
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Leu	Gln	His	Asn	Arg	Ile	Trp	Glu	Ile	Gly	Ala	Asp	Thr	Phe	Ser	Gln
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Leu	Ser	Ser	Leu	Gln	Ala	Leu	Asp	Leu	Arg	Trp	Asn	Ala	Ile	Arg	Ser
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Ile	His	Pro	Glu	Ala	Phe	Ser	Thr	Leu	His	Ser	Leu	Val	Lys	Leu	Asp
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Leu	Thr	Asp	Asn	Gln	Leu	Thr	Thr	Leu	Pro	Leu	Ala	Gly	Leu	Gly	Gly
225					230					235					240
Leu	Met	His	Leu	Lys	Leu	Lys	Gly	Asn	Leu	Ala	Leu	Ser	Gln	Ala	Phe
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265

<210> 2695

<211> 2265

<212> DNA

<213> Homo sapiens

<400> 2695

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 720
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<211> 663

<212> PRT

<213> Homo sapiens

<400> 2696

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			20					25					30		
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			35				40					45			
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	50					55				60					
Ser	Ser	Thr	Trp	Pro	Leu	Asp	Pro	Gly	Val	Glu	Val	Thr	Leu	Thr	Met
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Lys	Ala	Ala	Ser	Gly	Ser	Thr	Gly	Asp	Gln	Lys	Val	Gln	Ile	Ser	Tyr
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Tyr	Gly	Pro	Lys	Thr	Pro	Pro	Val	Lys	Ala	Leu	Leu	Tyr	Leu	Thr	Ala
			100					105						110	
Val	Glu	Ile	Ser	Leu	Cys	Ala	Asp	Ile	Thr	Arg	Thr	Gly	Lys	Val	Lys
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Pro	Thr	Arg	Ala	Val	Lys	Asp	Gln	Arg	Thr	Trp	Thr	Trp	Gly	Pro	Cys

	130					135					140				
Gly	Gln	Gly	Ala	Ile	Leu	Leu	Val	Asn	Cys	Asp	Arg	Asp	Asn	Leu	Glu
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Ser	Ser	Ala	Met	Asp	Cys	Glu	Asp	Asp	Glu	Val	Leu	Asp	Ser	Glu	Asp
				165					170					175	
Leu	Gln	Asp	Met	Ser	Leu	Met	Thr	Leu	Ser	Thr	Lys	Thr	Pro	Lys	Asp
				180				185					190		
Phe	Phe	Thr	Asn	His	Thr	Leu	Val	Leu	His	Val	Ala	Arg	Ser	Glu	Met
		195					200					205			
Asp	Lys	Val	Arg	Val	Phe	Gln	Ala	Thr	Arg	Gly	Lys	Leu	Ser	Ser	Ly
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Cys	Ser	Val	Val	Leu	Gly	Pro	Lys	Trp	Pro	Ser	His	Tyr	Leu	Met	Val
225					230					235					240
Pro	Gly	Gly	Lys	His	Asn	Met	Asp	Phe	Tyr	Val	Glu	Ala	Leu	Ala	Phe
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Pro	Asp	Thr	Asp	Phe	Pro	Gly	Leu	Ile	Thr	Leu	Thr	Ile	Ser	Leu	Leu
				260				265					270		
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Lys	Ser	Val	Thr	Thr	Leu	Ala	Met	Lys	Ala	Lys	Cys	Lys	Leu	Thr	Ile
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Asp	Ser	Pro	Arg	Asn	Arg	Gly	Leu	Lys	Glu	Phe	Pro	Ile	Lys	Arg	Val
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				405					410					415	
Thr	Val	Arg	Gly	Lys	Glu	Tyr	Pro	Leu	Gly	Arg	Ile	Leu	Phe	Gly	Asp
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Ser	Cys	Tyr	Pro	Ser	Asn	Asp	Ser	Arg	Gln	Met	His	Gln	Ala	Leu	Gln
		435					440					445			
Asp	Phe	Leu	Ser	Ala	Gln	Gln	Val	Gln	Ala	Pro	Val	Lys	Leu	Tyr	Ser
		450				455					460				
Asp	Trp	Leu	Ser	Val	Gly	His	Val	Asp	Glu	Phe	Leu	Ser	Phe	Val	Pro
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<210> 2697

<211> 2468

<212> DNA

<213> Homo sapiens

<400> 2697

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<210> 2698

<211> 332

<212> PRT

<213> Homo sapiens

<400> 2698

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 Leu Thr Asn Glu Gln Leu Glu Ser Ala Arg Lys Ile Val His Asp Tyr
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 Arg Gln Gly Ile Val Pro Pro Gly Leu Thr Glu Asn Glu Leu Trp Arg
 65 70 75 80
 Ala Lys Tyr Ile Tyr Asp Ser Ala Phe His Pro Asp Thr Gly Glu Lys
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 195 200 205
 Arg Glu Leu Lys Val Gly Ile Pro Val Thr Asp Glu Asn Gly Asn Arg
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 Val Ser Arg Ile Leu Met Ala Ala Pro Gly Met Ala Ile Pro Pro Phe
 245 250 255
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<210> 2699

<211> 974

<212> DNA

<213> Homo sapiens

<400> 2699

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<211> 177

<212> PRT

<213> Homo sapiens

<400> 2700

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			20					25					30		
Thr	Gln	Pro	Ala	Asp	Val	Leu	Arg	Trp	Ser	Ala	Gly	Tyr	Phe	Ser	Ala
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Leu	Ser	Arg	Gly	Asp	Pro	Leu	Pro	Val	Lys	Asp	Arg	Met	Glu	Met	Pro
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Val	Ala	Thr	Gln	Lys	Thr	Asp	Thr	Gly	Leu	Thr	Gln	Gly	Leu	Leu	Lys
					70				75					80	
Val	Leu	His	Lys	Gln	Cys	His	His	Lys	Arg	Tyr	Val	Glu	Leu	Thr	Asp
					85				90					95	
Leu	Glu	Gln	Lys	Trp	Lys	Asn	Leu	Cys	Leu	Pro	Lys	Glu	Lys	Phe	Lys
			100				105						110		
Ala	Leu	Leu	Gln	Leu	Asp	Pro	Cys	Glu	Asn	Lys	Ile	Lys	Trp	Ile	Asn

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 <213> Homo sapiens

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480
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<210> 2702
 <211> 92
 <212> PRT
 <213> Homo sapiens

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Leu Gly Pro Gly Asp Gln Glu Ser Arg Trp Lys Gln Tyr Leu Glu Asp
      20           25           30
Glu Arg Ile Ala Leu Phe Leu Gln Asn Glu Glu Phe Met Lys Glu Leu
      35           40           45
Gln Arg Asn Arg Asp Phe Leu Leu Ala Leu Glu Arg Asp Arg Leu Lys
      50           55           60
Tyr Glu Ser Gln Lys Ser Lys Ser Ser Ser Val Ala Val Gly Asn Asp

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					85						90						
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<211> 610																	
<212> DNA																	
<213> Homo sapiens																	
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120																	
ataaaatgca	aaccacccct	ctgtagcaac	tcacccatct	gcctcgcccc	tgaatgttcg												
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<211> 108																	
<212> PRT																	
<213> Homo sapiens																	
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1	5				10				15								
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20			25			30											
Lys	Ala	Ile	Lys	Ala	Gly	Ile	Lys	Cys	Lys	Pro	Pro	Leu	Cys	Ser	Asn		
35		40		45		60				65							
Ser	Pro	Ile	Cys	Ile	Ala	Arg	Glu	Cys	Ser	Gly	Pro	Trp	Gly	Lys	Gly		
50			55			60			75				80				
Leu	Leu	Pro	Pro	Glu	Gly	Thr	Leu	Leu	Pro	Arg	Pro	Leu	Leu	Gly	Glu		
70					75					80							
Gly	Pro	Lys	Gly	Glu	Ala	Ser	Lys	Phe	Pro	Leu	Phe	Phe	Asp	Leu	Ser		
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Leu	Val	His	Leu	Pro	Gln	Ala	His	Pro	Ala	Ala	Ser						
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<210> 2705

<211> 843

<212> DNA

<213> Homo sapiens

<400> 2705

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720  actgatgaag  ctggtcagag  acttggccac  tcggtgactg  ctgccaacaa  gggcatcttc
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atg
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<210> 2706

<211> 251

<212> PRT

<213> Homo sapiens

<400> 2706

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Pro Arg Trp  Asp Gln  Ser Thr  Phe Leu  Gly Arg  Ala Arg  His Phe Phe
20         25         30
Thr Val Thr  Asp Pro  Arg Asn  Leu Leu  Leu Ser  Gly Ala  Gln Leu Glu
35         40         45
Ala Ser Arg  Asn Ile  Val Gln  Asn Tyr  Arg Ala  Gly Val  Val Thr Pro
50         55         60
Gly Ile Thr  Glu Asp  Gln Leu  Trp Arg  Ala Lys  Tyr Val  Tyr Asp Ser
65         70         75         80
Ala Phe His  Pro Asp  Thr Gly  Glu Lys  Val Val  Leu Ile  Gly Arg Met

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	85		90		95										
Ser	Ala	Gln	Val	Pro	Met	Asn	Met	Thr	Ile	Thr	Gly	Cys	Met	Leu	Thr
Phe	Tyr	Arg	Lys	Thr	Pro	Thr	Val	Val	Phe	Trp	Gln	Trp	Val	Asn	Gln
Ser	Phe	Asn	Ala	Ile	Val	Asn	Tyr	Ser	Asn	Arg	Ser	Gly	Asp	Thr	Pro
Ile	Thr	Val	Arg	Gln	Leu	Gly	Thr	Ala	Tyr	Val	Ser	Ala	Thr	Thr	Gly
Ala	Val	Ala	Thr	Ala	Leu	Gly	Leu	Lys	Ser	Leu	Thr	Lys	His	Leu	Pro
Pro	Leu	Val	Gly	Arg	Phe	Val	Pro	Phe	Ala	Ala	Val	Ala	Ala	Ala	Asn
Cys	Ile	Asn	Ile	Pro	Leu	Met	Arg	Gln	Arg	Glu	Leu	Gln	Val	Gly	Ile
Pro	Val	Thr	Asp	Glu	Ala	Gly	Gln	Arg	Leu	Gly	His	Ser	Val	Thr	Ala
Ala	Lys	Gln	Gly	Ile	Phe	Gln	Val	Val	Val	Ser	Arg	Ile	Gly	Met	Ala
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<210> 2707

<211> 2921

<212> DNA

<213> Homo sapiens

<400> 2707

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<210> 2708

<211> 337

<212> PRT

<213> Homo sapiens

<400> 2708

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			20					25					30		
Ala	Ala	Arg	Leu	Ala	Cys	Ser	Ala	Pro	Thr	Pro	Gly	Gly	Gly	Thr	Met
		35					40				45				
Pro	Phe	Asp	Phe	Arg	Arg	Phe	Asp	Ile	Tyr	Arg	Lys	Val	Pro	Lys	Asp
	50				55					60					
Leu	Thr	Gln	Pro	Thr	Tyr	Thr	Gly	Ala	Ile	Ile	Ser	Ile	Cys	Cys	Cys
65				70					75					80	
Leu	Phe	Ile	Leu	Phe	Leu	Phe	Leu	Ser	Glu	Leu	Thr	Gly	Phe	Ile	Thr
			85					90					95		
Thr	Glu	Val	Val	Asn	Glu	Leu	Tyr	Val	Asp	Asp	Pro	Asp	Lys	Asp	Ser
			100					105					110		
Gly	Gly	Lys	Ile	Asp	Val	Ser	Leu	Asn	Ile	Ser	Leu	Pro	Asn	Leu	His
		115					120					125			
Cys	Glu	Leu	Val	Gly	Leu	Asp	Ile	Gln	Asp	Glu	Met	Gly	Arg	His	Glu
		130			135						140				
Val	Gly	His	Ile	Asp	Asn	Ser	Met	Lys	Ile	Pro	Leu	Asn	Asn	Gly	Ala
145				150					155					160	
Gly	Cys	Arg	Phe	Glu	Gly	Gln	Phe	Ser	Ile	Asn	Lys	Val	Pro	Gly	Asn
			165					170						175	
Phe	His	Val	Ser	Thr	His	Ser	Ala	Thr	Ala	Gln	Pro	Gln	Asn	Pro	Asp
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	195						200					205			
Gln	Asn	Ile	His	Gly	Ala	Phe	Asn	Ala	Leu	Gly	Gly	Ala	Asp	Arg	Leu
	210					215						220			
Thr	Ser	Asn	Pro	Leu	Ala	Ser	His	Asp	Tyr	Ile	Leu	Lys	Ile	Val	Pro

225		230		235		240									
Thr	Val	Tyr	Glu	Asp	Lys	Ser	Gly	Lys	Gln	Arg	Tyr	Ser	Tyr	Gln	Tyr
			245					250						255	
Thr	Val	Ala	Asn	Lys	Glu	Tyr	Val	Ala	Tyr	Ser	His	Thr	Gly	Arg	Ile
			260					265					270		
Ile	Pro	Ala	Ile	Trp	Phe	Arg	Tyr	Asp	Leu	Ser	Pro	Ile	Thr	Val	Lys
			275					280					285		
Tyr	Thr	Glu	Arg	Arg	Gln	Pro	Leu	Tyr	Arg	Phe	Ile	Thr	Thr	Ile	Cys
			290					295					300		
Ala	Ile	Ile	Gly	Gly	Thr	Phe	Thr	Val	Ala	Gly	Ile	Leu	Asp	Ser	Cys
			305					310					315		320
Ile	Phe	Thr	Ala	Ser	Glu	Ala	Trp	Lys	Lys	Ile	Gln	Leu	Gly	Lys	Met
			325					330						335	

His

<210> 2709

<211> 984

<212> DNA

<213> Homo sapiens

<400> 2709

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720
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780
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<210> 2710

<211> 242

<212> PRT

<213> Homo sapiens

<400> 2710

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 20          25          30
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 35          40          45
Ala Ser Gly Gln Ala Lys Ser Ser Lys Glu Ser Lys Asp Ser Lys
 50          55          60
Thr Ser Ser Lys Asp Asp Lys Gly Ser Thr Ser Ser Thr Ser Gly Ser
 65          70          75          80
Ser Gly Ser Ser Thr Lys Asn Ile Trp Val Ser Gly Leu Ser Ser Asn
 85          90          95
Thr Lys Ala Ala Asp Leu Lys Asn Leu Phe Gly Lys Tyr Gly Lys Val
 100         105         110
Leu Ser Ala Lys Val Val Thr Asn Ala Arg Ser Pro Gly Ala Lys Cys
 115         120         125
Tyr Gly Ile Val Thr Met Ser Ser Thr Glu Val Ser Arg Cys Ile
 130         135         140
Ala His Leu His Arg Thr Glu Leu His Gly Gln Leu Ile Ser Val Glu
 145         150         155         160
Lys Val Lys Gly Asp Pro Ser Lys Lys Glu Met Lys Lys Glu Asn Asp
 165         170         175
Glu Lys Ser Ser Ser Arg Ser Ser Gly Asp Lys Lys Asn Thr Ser Asp
 180         185         190
Arg Ser Ser Lys Thr Gln Ala Ser Val Lys Lys Glu Glu Lys Arg Ser
 195         200         205
Ser Glu Lys Ser Glu Lys Lys Glu Ser Lys Asp Thr Lys Lys Ile Glu
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Gly Lys Asp Glu Lys Asn Asp Asn Gly Ala Ser Gly Gln Thr Ser Glu
 225         230         235         240
Ser Ile
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<210> 2711

<211> 6536

<212> DNA

<213> Homo sapiens

<400> 2711

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 180
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 Leu Arg Ser Thr Ala Thr Pro Ser Pro Ser Pro His Ala Trp Asp Leu
 1970 1975 1980
 Gln Leu Leu Gln Gln Gln Ala Cys Pro Met Val Pro Arg Glu Gln Phe
 1985 1990 1995 2000
 Leu Gln Leu Gln Arg Gln Leu Leu Gln Ala Glu Arg Ile Asn Gln His
 2005 2010 2015
 Leu Gln Glu Glu Leu Glu Asn Arg Thr Ser Glu Thr Asn Thr Pro Gln
 2020 2025 2030
 Gly Asn Gln Glu Gln Leu Val Thr Val Met Glu Glu Arg Met Ile Glu
 2035 2040 2045
 Val Glu Gln Lys Leu Lys Leu Val Lys Arg Leu Glu Gln Lys Val
 2050 2055 2060
 Asn Gln Leu Lys Glu Gln Val Ser Leu Pro Gly His Leu Cys Ser Pro
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<210> 2713

<211> 2066

<212> DNA

<213> Homo sapiens

<400> 2713

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<211> 214

<212> PRT

<213> Homo sapiens

<400> 2714

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 Leu Val Glu Thr Ser Gly Ile Ser Ile Tyr Arg Leu Leu Asp Lys Lys
 35 40 45
 Thr Gly Leu Tyr Glu Tyr Lys Val Phe Gly Val Leu Glu Asp Cys Ser
 50 55 60
 Pro Thr Leu Leu Ala Asp Ile Tyr Met Asp Ser Asp Tyr Arg Lys Gln
 65 70 75 80
 Trp Asp Gln Tyr Val Lys Glu Leu Tyr Glu Gln Glu Cys Asn Gly Glu
 85 90 95
 Thr Val Val Tyr Trp Glu Val Lys Tyr Pro Phe Pro Met Ser Asn Arg
 100 105 110
 Asp Tyr Val Tyr Leu Arg Gln Arg Arg Asp Leu Asp Met Glu Gly Arg
 115 120 125
 Lys Ile His Val Ile Leu Ala Arg Ser Thr Ser Met Pro Gln Leu Gly
 130 135 140
 Glu Arg Ser Gly Val Ile Arg Val Lys Gln Tyr Lys Gln Ser Leu Ala
 145 150 155 160
 Ile Glu Ser Asp Gly Lys Lys Gly Ser Lys Val Phe Met Tyr Tyr Phe
 165 170 175
 Asp Asn Pro Gly Gly Gln Ile Pro Ser Trp Leu Ile Asn Trp Ala Ala
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 195 200 205
 Asn Tyr Leu Lys Lys Thr
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<210> 2715
 <211> 378
 <212> DNA
 <213> Homo sapiens

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 378

<210> 2716
 <211> 126
 <212> PRT
 <213> Homo sapiens

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 Gln Arg Gly Asp Leu Ser Asp Val Glu Glu Glu Glu Glu Met
 35 40 45
 Asp Val Asp Glu Ala Thr Gly Ala Val Lys Lys His Asn Gly Val Gly
 50 55 60
 Gly Ser Pro Pro Lys Ser Lys Leu Leu Phe Ser Asn Thr Ala Ala Gln
 65 70 75 80
 Lys Leu Arg Gly Met Asp Glu Val Tyr Asn Leu Phe Tyr Val Asn Asn
 85 90 95
 Asn Trp Tyr Ile Phe Met Arg Leu His Gln Ile Leu Cys Leu Arg Leu
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<210> 2717
 <211> 2076
 <212> DNA
 <213> Homo sapiens

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 1980
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<210> 2718

<211> 110

<212> PRT

<213> Homo sapiens

<400> 2718

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Glu	Gly	Pro	Arg	Pro	Glu	Asn	Thr	Leu	Gly	Leu	Ser	Ser	Pro	Ala	Gln
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Gly	Thr	Thr	Phe	Phe	Val	Leu	Phe	Glu	Val	Ser	Ser	Gly	Ser	Lys	Leu
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<210> 2719

<211> 546

<212> DNA

<213> Homo sapiens

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<210> 2720
 <211> 182
 <212> PRT
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 35 40 45
 Leu Asp Val Pro Leu Glu Gln Glu Met Ala Lys Glu Asp Pro Val Cys
 50 55 60
 Ala Pro Glu Ser Met Gly Ser Glu Asp Met Leu Phe Met Leu Tyr Thr
 65 70 75 80
 Ser Gly Ser Thr Gly Met Pro Lys Gly Ile Val His Thr Gln Ala Gly
 85 90 95
 Tyr Leu Leu Tyr Ala Ala Leu Thr His Lys Leu Val Phe Asp His Gln
 100 105 110
 Pro Gly Asp Ile Phe Gly Cys Val Ala Asp Ile Gly Trp Ile Thr Gly
 115 120 125
 His Ser Tyr Val Val Tyr Gly Pro Leu Cys Asn Gly Ala Thr Ser Val
 130 135 140
 Leu Phe Glu Ser Thr Pro Val Tyr Pro Asn Ala Gly Arg Tyr Trp Glu
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 Val Arg Leu Leu Leu Lys
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<210> 2721
 <211> 5912
 <212> DNA
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 gtgcttgta caagaagaac ctgcagaagg ataatttgca catggagctg tgataacact
 5280
 aatgttgatt tttttttttt ttacaagtca tcagagatgt ttgcaaatg agttttattt
 5340
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 5400
 agaaaacagg aatgttaata atgtcgaaca gaaaacttcc tcccttatta atatataatc
 5460
 ctcatgtatt tatgcctaata gtaagctgac ttttaaaaag ctttcttttg ttgcatgccc
 5520
 tgtgcaggca tctgtattgt acatgcatgc ctttcgtcct gttttcctgt ataaagttag
 5580
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 5640
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 taatgtttga agatgctggt ctttgcaagt gtacagttt caaatgttgt taccagtga
 5760
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 5880
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 5912

<210> 2722

<211> 508

<212> PRT

<213> Homo sapiens

<400> 2722

Arg	Gln	Leu	Leu	Ser	Tyr	Ala	Leu	Ile	His	Pro	Ala	Thr	Ser	Leu	Glu
1				5					10					15	
Asp	Arg	Ser	Ala	Leu	Ala	Met	Trp	Leu	Asn	His	Leu	Glu	Asp	Arg	Thr
			20					25					30		
Ser	Thr	Ser	Phe	Gly	Gly	Gln	Asn	Arg	Gly	Arg	Ser	Asp	Ser	Val	Asp
			35				40				45				
Tyr	Gly	Gln	Thr	His	Tyr	Tyr	His	Gln	Arg	Gln	Asn	Ser	Asp	Asp	Lys
	50					55					60				
Leu	Asn	Gly	Trp	Gln	Asn	Ser	Arg	Asp	Ser	Gly	Ile	Cys	Ile	Asn	Ala
65				70					75					80	
Ser	Asn	Trp	Gln	Asp	Lys	Ser	Met	Gly	Cys	Glu	Asn	Gly	His	Val	Pro
			85					90					95		
Leu	Tyr	Ser	Ser	Ser	Ser	Val	Pro	Thr	Thr	Ile	Asn	Thr	Ile	Gly	Thr
			100					105					110		
Ser	Thr	Ser	Thr	Asn	Val	Pro	Ala	Trp	Leu	Lys	Ser	Leu	Arg	Leu	His
			115				120				125				
Lys	Tyr	Ala	Ala	Leu	Phe	Ser	Gln	Met	Thr	Tyr	Glu	Glu	Met	Met	Ala
			130			135					140				
Leu	Thr	Glu	Cys	Gln	Leu	Glu	Ala	Gln	Asn	Val	Thr	Lys	Gly	Ala	Arg
145				150				155						160	
His	Lys	Ile	Val	Ile	Ser	Ile	Gln	Lys	Leu	Lys	Glu	Arg	Gln	Asn	Leu

```

165              170              175
Leu Lys Ser Leu Glu Arg Asp Ile Ile Glu Gly Gly Ser Leu Arg Ile
180              185              190
Pro Leu Gln Glu Leu His Gln Met Ile Leu Thr Pro Ile Lys Ala Tyr
195              200              205
Ser Ser Pro Ser Thr Thr Pro Glu Ala Arg Arg Arg Glu Pro Gln Ala
210              215              220
Pro Arg Gln Pro Ser Leu Met Gly Pro Glu Ser Gln Ser Pro Asp Cys
225              230              235
Lys Asp Gly Ala Ala Ala Thr Gly Ala Thr Ala Thr Pro Ser Ala Gly
245              250              255
Ala Ser Gly Gly Leu Gln Pro His Gln Leu Ser Ser Cys Asp Gly Glu
260              265              270
Leu Ala Val Ala Pro Leu Pro Glu Gly Asp Leu Pro Gly Gln Phe Thr
275              280              285
Arg Val Met Gly Lys Val Cys Thr Gln Leu Leu Val Ser Arg Pro Asp
290              295              300
Glu Glu Asn Ile Ser Ser Tyr Leu Gln Leu Ile Asp Lys Cys Leu Ile
305              310              315
His Glu Ala Phe Thr Glu Thr Gln Lys Lys Arg Leu Leu Ser Trp Lys
320              325              330
Gln Gln Val Gln Lys Leu Phe Arg Ser Phe Pro Arg Lys Thr Leu Leu
335              340              345
Asp Ile Ser Gly Tyr Arg Gln Gln Arg Asn Arg Gly Phe Gly Gln Ser
350              355              360
Asn Ser Leu Pro Thr Ala Gly Ser Val Gly Gly Gly Met Gly Arg Arg
365              370              375
Asn Pro Arg Gln Tyr Gln Ile Pro Ser Arg Asn Val Pro Ser Ala Arg
380              385              390
Leu Gly Leu Leu Gly Thr Ser Gly Phe Val Ser Ser Asn Gln Arg Asn
395              400              405
Thr Thr Ala Thr Pro Thr Ile Met Lys Gln Gly Arg Gln Asn Leu Trp
410              415              420
Phe Ala Asn Pro Gly Gly Ser Asn Ser Met Pro Ser Arg Thr His Ser
425              430              435
Ser Val Gln Arg Thr Arg Ser Leu Pro Val His Thr Ser Pro Gln Asn
440              445              450
Met Leu Met Phe Gln Gln Pro Glu Phe Gln Leu Pro Val Thr Glu Pro
455              460              465
Asp Ile Asn Asn Arg Leu Glu Ser Leu Cys Leu Ser Met Thr Glu His
470              475              480
Ala Leu Gly Asp Gly Val Asp Arg Thr Ser Thr Ile
485              490              495
500              505

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<210> 2723

<211> 1221

<212> DNA

<213> Homo sapiens

<400> 2723

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ntgatcaccgg gggcagccga ctctaagggtg catgtgcacg acctgacagt aaaggagacc
60
atccacatgt ttggagacca cacaaccgg gtgaagcgca tcgccacagc gcccatgtgg
120

```

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cccaacacat tctggagtgc tgctgaggat gggcttatcc gccagtatga ccttcgagag
180
aacagcaaac actcggaggt gctgattgac ctgacagagt actgtggcca gctgggtggag
240
gccaaagtgc tcaactgtcaa cccccaggac aacaactgcc tggcagttgg ggccagcggg
300
cccttcgtga ggctctatga catccgcatg atccataacc acagaaaagag catgaagcag
360
agcccttcag cgggtgtgca caccttctgt gaccggcaga aaccctctcc ggacgggtga
420
gcccagattt acgtagcagg tcacctgcca gtgaagcttc ctgactacaa caaccgtttg
480
agagtgcctg ttgccaccta tgtgaccttc agccccaatg gcacagagct actagtcaac
540
atgggggggg aacagggtcta tttgtttgac ttgacttaca agcagcggcc gtacaccttc
600
ctcttcgcta gaaaatgcc ctcctcgggg gaagtccaga atggcaagat gtccaccaac
660
gggtgtgtcca acggtgtgtc caatggcctg caccttcata gcaatggcct cgggtgccg
720
gagagtaggg gacatgtcag cccccaagta gagctaccac catacctgga gcgtgtgaaa
780
cagcaagcca atgaggcttt tgctcgccag cagtggaccc aagccattca gctttacagc
840
aaggctgtgc agagggcccc tcacaatgcc atgctttatg gaaaccgagc agcagcctac
900
atgaagcgca agtgggatgg tgaccactat gatgccctga gggactgcct caaggccatc
960
tcctaaaacc catgccacct gaaggcacac ttctgcctgg cccgctgcct ctttgagctc
1020
aagtatgtgg ctgaagccct ggagtgcctg gacgacttca aagggaaatt tccggagcag
1080
gcccacagca gcgcttgtga tgcattgggc cgcgacatca cagctgcctc cttctctaaa
1140
aatgatgggt aggagaagaa gggacctggt ggcggcgccc cagtcgcctc ccgcagcacg
1200
agccgcaagg gatgcacgcg t
1221

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<210> 2724

<211> 404

<212> PRT

<213> Homo sapiens

<400> 2724

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Gly Ala Ala Asp Ser Lys Val His Val His Asp Leu Thr Val Lys Glu
1      5      10      15
Thr Ile His Met Phe Gly Asp His Thr Asn Arg Val Lys Arg Ile Ala
20     25     30
Thr Ala Pro Met Trp Pro Asn Thr Phe Trp Ser Ala Ala Glu Asp Gly
35     40     45
Leu Ile Arg Gln Tyr Asp Leu Arg Glu Asn Ser Lys His Ser Glu Val
50     55     60
Leu Ile Asp Leu Thr Glu Tyr Cys Gly Gln Leu Val Glu Ala Lys Cys

```

```

65          70          75          80
Leu Thr Val Asn Pro Gln Asp Asn Asn Cys Leu Ala Val Gly Ala Ser
85
Gly Pro Phe Val Arg Leu Tyr Asp Ile Arg Met Ile His Asn His Arg
100
Lys Ser Met Lys Gln Ser Pro Ser Ala Gly Val His Thr Phe Cys Asp
115
Arg Gln Lys Pro Leu Pro Asp Gly Ala Ala Gln Tyr Tyr Val Ala Gly
130
His Leu Pro Val Lys Leu Pro Asp Tyr Asn Asn Arg Leu Arg Val Leu
145
Val Ala Thr Tyr Val Thr Phe Ser Pro Asn Gly Thr Glu Leu Leu Val
165
Asn Met Gly Gly Glu Gln Val Tyr Leu Phe Asp Leu Thr Tyr Lys Gln
180
Arg Pro Tyr Thr Phe Leu Leu Pro Arg Lys Cys His Ser Ser Gly Glu
195
Val Gln Asn Gly Lys Met Ser Thr Asn Gly Val Ser Asn Gly Val Ser
210
Asn Gly Leu His Leu His Ser Asn Gly Phe Arg Leu Pro Glu Ser Arg
225
Gly His Val Ser Pro Gln Val Glu Leu Pro Pro Tyr Leu Glu Arg Val
245
Lys Gln Gln Ala Asn Glu Ala Phe Ala Cys Gln Gln Trp Thr Gln Ala
260
Ile Gln Leu Tyr Ser Lys Ala Val Gln Arg Ala Pro His Asn Ala Met
275
Leu Tyr Gly Asn Arg Ala Ala Ala Tyr Met Lys Arg Lys Trp Asp Gly
290
Asp His Tyr Asp Ala Leu Arg Asp Cys Leu Lys Ala Ile Ser Leu Asn
305
Pro Cys His Leu Lys Ala His Phe Arg Leu Ala Arg Cys Leu Phe Glu
325
Leu Lys Tyr Val Ala Glu Ala Leu Glu Cys Leu Asp Asp Phe Lys Gly
340
Lys Phe Pro Glu Gln Ala His Ser Ser Ala Cys Asp Ala Leu Gly Arg
355
Asp Ile Thr Ala Ala Leu Phe Ser Lys Asn Asp Gly Glu Glu Lys Lys
370
Gly Pro Gly Gly Gly Ala Pro Val Arg Leu Arg Ser Thr Ser Arg Lys
385
Gly Cys Thr Arg
390
400

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<210> 2725

<211> 856

<212> DNA

<213> Homo sapiens

<400> 2725

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60
ctgaacccegg cggccctgcc cgccctccc tccagcatca tggccagccc aagaaccagg
120

```

```

aagggtcttta aagaagtcag ggtgcaggat gagaacaacg ttgtttttga gtgtggcgcg
180
ttcaatcctc agtgggtcag tgtgacctac ggcactctgga tctgcctgga gtgctcgggg
240
agacaccgcy ggcttggggt tcacctcagc ttgtgctgct ctgttactat ggacaagtgg
300
aaggacattg agcttgagaa gatgaaagct ggtgggaatg ctaagttccg agagttcctg
360
gagtctcagg aggtattacga tccttgctgg tccttgccagg agaagtacaa cagcagagcc
420
gcggccctct ttagggataa ggtggctgct ctggccgaag gcagagagtg gtctctggag
480
tcacacctg cccagaactg gacccccact cagcccgga cgctgccgtc catggtgcac
540
cggtagctgc tcctcgtagg gccttagtac agtttccact gggctcctgaa cttagtagat
600
tgggtttccc acagaattct ccccttcttt gctgttgtga cagctctttt cccagaagtc
660
agtgggaaaa acagcttttt aaaattgcc aacaataca agcttttagt aaatttggac
720
accctatagag ctgtctcaga tagcggccca ggtaagctcc gcacgccttc cagggtgtgca
780
cacagccgtg tctgcctggt cgctgtggga gttcacatct ccatctgctc accgggggtg
840
tgtctgccct tcacgc
856

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<210> 2726

<211> 148

<212> PRT

<213> Homo sapiens

<400> 2726

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Met Ala Ser Pro Arg Thr Arg Lys Val Leu Lys Glu Val Arg Val Gln
1      5      10      15
Asp Glu Asn Asn Val Cys Phe Glu Cys Gly Ala Phe Asn Pro Gln Trp
20     25     30
Val Ser Val Thr Tyr Gly Ile Trp Ile Cys Leu Glu Cys Ser Gly Arg
35     40     45
His Arg Gly Leu Gly Val His Leu Ser Phe Val Arg Ser Val Thr Met
50     55     60
Asp Lys Trp Lys Asp Ile Glu Leu Glu Lys Met Lys Ala Gly Gly Asn
65     70     75     80
Ala Lys Phe Arg Glu Phe Leu Glu Ser Gln Glu Asp Tyr Asp Pro Cys
85     90     95
Trp Ser Leu Gln Glu Lys Tyr Asn Ser Arg Ala Ala Ala Leu Phe Arg
100    105    110
Asp Lys Val Val Ala Leu Ala Glu Gly Arg Glu Trp Ser Leu Glu Ser
115    120    125
Ser Pro Ala Gln Asn Trp Thr Pro Pro Gln Pro Arg Thr Leu Pro Ser
130    135    140
Met Val His Arg
145

```


<210> 2727
 <211> 1119
 <212> DNA
 <213> Homo sapiens

<400> 2727
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 acaaaaataa caagtacatg gcattaagtt aaatgtctct gcacatgaat ttccacctta
 120
 taaatctggt atattaaatt gtgctgtaaa tagatttgta tttttcttt tttgagtact
 180
 atgatagggt aaatgggtatg actataaaaa ggatttgggt ctttttgtct cctggaatga
 240
 catgatgcct ttctagagaa agaaaaattg caggctacag gaaaatgata aaaactactg
 300
 gattcattta gactattcga tttaggaagg tacaaccact tctttaacat caagctaaaa
 360
 gtgggggaaa gtctcagctc ccaggtagg tctcctctca cactgtcctg ggtggcaggc
 420
 gctgtttata catgcccgtc atcgctctgg ctgcactgta gatcatctgc cgacgggaca
 480
 tcccagtaaa tgccatgtgc caatcagtcg ggctgacatt cagtaaaact tttccaggga
 540
 cttcaccacc tgtcaccaaa aggctgacc acctcagatt atagtctcgg ggagtttagc
 600
 tttgagcctg ctgtacaaat tccaaaggca ctgggtgtggc ttgtgtaaat gtttcttagt
 660
 gaatgccatg gacaggatct tcaaccacca aacaaccaat gtcaaaccat ttgtcaggca
 720
 gcaattctgc aatgaagttt tctactgaca cagctgtctg tttttcatg atcaccgccg
 780
 ttgcagcga gctatctatc cgttctctgag caccctttaa tccagctgca tagccactg
 840
 gttgtggggc aatattggac tgtccagcct cccctacaac cacagctagg cgaagacct
 900
 cctggaaggc atctcggaca gcagccactt tcaactcttt atttgaggtc actacaatat
 960
 ccagttcacc tccagatttg atatagggag ccattgccagg gtccagcgtt gtaatcatg
 1020
 ttttactga atgttttgc ttatcaagca cagacttcac cataggattc ccagccacac
 1080
 ctttaataaa accccagatt ccaccagcag atgcttcat
 1119

<210> 2728
 <211> 221
 <212> PRT
 <213> Homo sapiens

<400> 2728
 Met Val Lys Ser Val Leu Asp Lys Thr Lys His Ser Val Glu Ser Met
 1 5 10 15
 Ile Thr Thr Leu Asp Pro Gly Met Ala Pro Tyr Ile Lys Ser Gly Gly

	20		25		30
Glu	Leu	Asp	Ile	Val	Val
	35		40		45
Val	Arg	Asp	Ala	Phe	Gln
	50		55		60
Glu	Ala	Gly	Gln	Ser	Asn
	65		70		75
Gly	Leu	Lys	Gly	Ala	Gln
			85		90
Val	Ile	His	Glu	Lys	Gln
			100		105
Glu	Leu	Leu	Pro	Asp	Lys
			115		120
Asp	Pro	Val	His	Gly	Ile
			130		135
Val	Pro	Leu	Glu	Phe	Val
			145		150
Tyr	Asn	Leu	Arg	Trp	Ser
			165		170
Glu	Lys	Ser	Leu	Leu	Asn
			180		185
Thr	Gly	Met	Ser	Arg	Gln
			195		200
Ala	Gly	Met	Tyr	Lys	Gln
			210		215

<210> 2729

<211> 393

<212> DNA

<213> Homo sapiens

<400> 2729

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atgcagcccc agcagtgggtg aggcactact ttcttgaaga gttgtgcacg catgtaggtc
120
agctgctctg ccacgagatc ttctgagaag cacgtgaatt ctgctgactc tccaccctcc
180
agttcctctt cctcttccat actaaggggc tggtcttgacc agtgtgcaga agacttccga
240
gagccccctc acttccccctg ettacagaaa ctgctggatt atctcacacg gatgatgccg
300
ggctctgacc cagaaagaag agcacaaaat cttcttgagc agtttcagaa gcaagaagtg
360
gaaactgaca atgggcttcc caacacgata tcc
393

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<210> 2730

<211> 92

<212> PRT

<213> Homo sapiens

<400> 2730

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Val Ser Cys Ser Ala Thr Arg Ser Ser Glu Lys His Val Asn Ser Ala

```

```

1           5           10           15
Asp Ser Pro Pro Ser Ser Ser Ser Ser Ser Ile Leu Arg Ala Trp
                20           25           30
Leu Asp Gln Cys Ala Glu Asp Phe Arg Glu Pro Pro His Phe Pro Cys
                35           40           45
Leu Gln Lys Leu Leu Asp Tyr Leu Thr Arg Met Met Pro Gly Ser Asp
                50           55           60
Pro Glu Arg Arg Ala Gln Asn Leu Leu Glu Gln Phe Gln Lys Gln Glu
65           70           75           80
Val Glu Thr Asp Asn Gly Leu Pro Asn Thr Ile Ser
                85           90

```

<210> 2731

<211> 447

<212> DNA

<213> Homo sapiens

<400> 2731

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ncgcctccga cctgaaagca cgtccacctc tgcggctcct acctgggtgc aatcgagtta
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aatggctgat aagcagatca gcctgccagc caagctcatc aatggcgga tcgcgggctg
120
atcgggtgca cctgcgtgtt tcccatcgac ctggccaaga ccaggctgca gaaccagcag
180
aacggccagc gcgtgtacac gagcatgtcc gactgcctca tcaagacctg ccgctccgag
240
ggctactctg ccatgtaccg gggagctgct gtgaacttga cctcgtcac ccccgagaag
300
gccatcaagc tggcagccaa cgactctctc cgacatcagc tctctaagga cgggcagaag
360
ctgacctctg ttaaagagat gctggcgggc tgtggggctg gcacctgcca ggtgatcgtg
420
accacgccca tggagatgct gaagatc
447

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<210> 2732

<211> 125

<212> PRT

<213> Homo sapiens

<400> 2732

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Ala Asp Gln Pro Ala Ser Gln Ala His Gln Trp Arg His Arg Gly Leu
1           5           10           15
Ile Gly Val Thr Cys Val Phe Pro Ile Asp Leu Ala Lys Thr Arg Leu
                20           25           30
Gln Asn Gln Gln Asn Gly Gln Arg Val Tyr Thr Ser Met Ser Asp Cys
                35           40           45
Leu Ile Lys Thr Val Arg Ser Glu Gly Tyr Phe Gly Met Tyr Arg Gly
                50           55           60
Ala Ala Val Asn Leu Thr Leu Val Thr Pro Glu Lys Ala Ile Lys Leu
65           70           75           80
Ala Ala Asn Asp Phe Phe Arg His Gln Leu Ser Lys Asp Gly Gln Lys
                85           90           95
Leu Thr Leu Leu Lys Glu Met Leu Ala Gly Cys Gly Ala Gly Thr Cys

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```

                100                105                110
Gln Val Ile Val Thr Thr Pro Met Glu Met Leu Lys Ile
                115                120                125

<210> 2733
<211> 3619
<212> DNA
<213> Homo sapiens

<400> 2733
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tcgggcatgg gtatgggggt ccagagggct ctggccacct ggggcttgct gtcttgagag
120
ccccagcacc catgtcacc ccaacagctg gactgcccg cggccatgga gcggatcaag
180
gaggaccggc ccatcaccat caaggacgac aaggggcaacc tcaaccgctg catcgagac
240
gtggtctcgc tcttcatcac ggtcatggac aagctgcgcc tggcggagct gacggtgagc
300
gagttcctag ctctgggctt tgactccgag tccgaatccg agtccgaaaa ttctccacaa
360
gcggagacac gggaaagcac cgaggctgcc cggagtccgg ataaccgggg cgggagcccc
420
tcggccagcc ggcgtaaagg ccgtgcctct gagcacaagg accagctctc tcgggtgaag
480
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540
agcgactcgg acagctctga ggaggaagag gggccgttcc actcctctgcc agatgtgctg
600
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660
agagggctga aggggaagaa gaattctgtt cctgtgaccg tcgccatggt tgagagatgg
720
aagcaggcag caaagcaacg cctcactcca aagctgttcc atgaagtggg acaggcgctt
780
cgagcagctg tggccaccac ccgaggggac caggaaagtg ctgaggccaa caaattccag
840
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900
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960
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1020
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1080
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1200
agcagagtct gcgggcacaa gaaggacact ttccttggcc ccgtcctcaa gcaaatgtac
1260
atcacgtatg tgaggaactg caagttcacc tcgcctgggt cctccccctt catcagtttc
1320

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atgcagtggg ccttgacgga gctgctggcc ctggagccgg gtgtggccta ccagcacgcc
 1380
 ttccctetaca tccgccagct cgccatacac ctgcgcaacg ccatgaccac ccgcaagaag
 1440
 gaaacatacc agtctgtgta caactggcag tatgtgcact gcctcttctc gtgggtgccgg
 1500
 gtccctgagca ctgcggggccc cagcgaagcc ctccagccct tgggtctacc ccttgcccaa
 1560
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 aagcccatca acttctccgt gatcctgaag ctgtccaatg tcaacctgca ggagaaggcg
 1800
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 1860
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 1920
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 1980
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 2220
 cgaagggaaga tggctgacag gaaggatgag gacaggaagc aatttaaaga cctctttgac
 2280
 ctgaacagct ctgaagagga gcacaccgag ggattcttgg aaagagggat actggggccc
 2340
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 2400
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 2460
 gccctggggg agctgcagca gctggcccag gggccggagg acgagctgga ggatctgcag
 2520
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 2580
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 2640
 aggcagtaga cacgggacag gctttattat ttatttttca gcatgaaaga ccaaactgat
 2700
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 2760
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 2820
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 2880
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 2940

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 3000
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 3120
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 3240
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 3360
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 3420
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 3480
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<210> 2734

<211> 790

<212> PRT

<213> Homo sapiens

<400> 2734

Met	Glu	Arg	Ile	Lys	Glu	Asp	Arg	Pro	Ile	Thr	Ile	Lys	Asp	Asp	Lys
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Gly	Asn	Leu	Asn	Arg	Cys	Ile	Ala	Asp	Val	Val	Ser	Leu	Phe	Ile	Thr
		20						25					30		
Val	Met	Asp	Lys	Leu	Arg	Leu	Ala	Glu	Leu	Thr	Val	Asp	Glu	Phe	Leu
		35				40					45				
Ala	Ser	Gly	Phe	Asp	Ser	Glu	Ser	Glu	Ser	Glu	Ser	Glu	Asn	Ser	Pro
		50				55					60				
Gln	Ala	Glu	Thr	Arg	Glu	Ala	Arg	Glu	Ala	Ala	Arg	Ser	Pro	Asp	Lys
65					70					75				80	
Pro	Gly	Gly	Ser	Pro	Ser	Ala	Ser	Arg	Arg	Lys	Gly	Arg	Ala	Ser	Glu
			85					90						95	
His	Lys	Asp	Gln	Leu	Ser	Arg	Leu	Lys	Asp	Arg	Asp	Pro	Glu	Phe	Tyr
			100					105					110		
Lys	Phe	Leu	Gln	Glu	Asn	Asp	Gln	Ser	Leu	Leu	Asn	Phe	Ser	Asp	Ser
		115					120					125			
Asp	Ser	Ser	Glu	Glu	Glu	Glu	Gly	Pro	Phe	His	Ser	Leu	Pro	Asp	Val
		130					135					140			
Leu	Glu	Glu	Ala	Ser	Glu	Glu	Glu	Asp	Gly	Ala	Glu	Glu	Gly	Glu	Asp
145					150					155				160	
Gly	Asp	Arg	Val	Pro	Arg	Gly	Leu	Lys	Gly	Lys	Lys	Asn	Ser	Val	Pro
				165				170						175	
Val	Thr	Val	Ala	Met	Val	Glu	Arg	Trp	Lys	Gln	Ala	Ala	Lys	Gln	Arg

[illegible]

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        610                615                620
Glu Gln Gln Ala Val Glu Ala Trp Glu Lys Leu Thr Arg Glu Glu Gly
625                630                635                640
Thr Pro Leu Thr Leu Tyr Tyr Ser His Trp Arg Lys Leu Arg Asp Arg
        645                650                655
Glu Ile Gln Leu Glu Ile Ser Gly Lys Glu Arg Val Arg Leu Gly Glu
        660                665                670
Gly Thr Trp Leu Glu Asp Leu Asn Phe Pro Glu Ile Lys Arg Arg Lys
        675                680                685
Met Ala Asp Arg Lys Asp Glu Asp Arg Lys Gln Phe Lys Asp Leu Phe
        690                695                700
Asp Leu Asn Ser Ser Glu Glu Asp Asp Thr Glu Gly Phe Leu Glu Arg
705                710                715                720
Gly Ile Leu Gly Pro Leu Ser Thr Arg His Gly Val Glu Asp Asp Glu
        725                730                735
Glu Asp Glu Glu Glu Gly Glu Glu Asp Ser Ser Asn Ser Glu Gly Glu
        740                745                750
Trp Ser Trp Asp Gly Asp Pro Asp Ala Glu Ala Gly Leu Ala Pro Gly
        755                760                765
Glu Leu Gln Gln Leu Ala Gln Gly Pro Glu Asp Glu Leu Glu Asp Leu
770                775                780
Gln Leu Ser Glu Asp Asp
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<210> 2735

<211> 1666

<212> DNA

<213> Homo sapiens

<400> 2735

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120
ctgtctgtga tcggggactc cggggtgggc aagacctgcc tgtgtgtccg cttaccgcac
180
aacgagttcc actcctcgca catctccacc atcgggtgtg actttaagat gaagaccata
240
gaggtagacg gcatcaaagt gcggatacag atctgggaca ctgcagggca ggagagatac
300
cagaccatca caaagcagta ctatcggcg gccccaggga tatttttggt ctatgacatt
360
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420
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480
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540
atggacttct atgaacaag tgccctgcacc aacctcaaca ttaagagtc attcacgcgt
600
ctgacagagc tgggtctgca ggcccatagg aaggagctgg aaggcctccg gatcgctgcc
660
agcaatgagt tggcactggc agagctggag gaggaggagg gcaaacccga gggcccagcg
720

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aactcttcga aaacctgctg gtgctgagtc ctgtgtgggg caccaccacac gacacccctc
780
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840
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900
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960
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1020
tctcaccatc ccgcacccac cagacaacag ccaggcctgg agtcaggccc actttcagct
1080
gtccctttct ccgtgcacgc tgtctcttct ctgctttttc tctcttcccc cacttctctt
1140
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1200
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1260
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1320
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1380
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1560
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1666

<210> 2736

<211> 218

<212> PRT

<213> Homo sapiens

<400> 2736

Met	Ala	Lys	Gln	Tyr	Asp	Val	Leu	Phe	Arg	Leu	Leu	Leu	Ile	Gly	Asp
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Ser	Gly	Val	Gly	Lys	Thr	Cys	Leu	Leu	Cys	Arg	Phe	Thr	Asp	Asn	Glu
			20					25					30		
Phe	His	Ser	Ser	His	Ile	Ser	Thr	Ile	Gly	Val	Asp	Phe	Lys	Met	Lys
		35					40				45				
Thr	Ile	Glu	Val	Asp	Gly	Ile	Lys	Val	Arg	Ile	Gln	Ile	Trp	Asp	Thr
	50					55					60				
Ala	Gly	Gln	Glu	Arg	Tyr	Gln	Thr	Ile	Thr	Lys	Gln	Tyr	Tyr	Arg	Arg
65					70				75					80	
Ala	Gln	Gly	Ile	Phe	Leu	Val	Tyr	Asp	Ile	Ser	Ser	Glu	Arg	Ser	Tyr
			85						90					95	
Gln	His	Ile	Met	Lys	Trp	Val	Ser	Asp	Val	Asp	Glu	Tyr	Ala	Pro	Glu
			100					105					110		
Gly	Val	Gln	Lys	Ile	Leu	Ile	Gly	Asn	Lys	Ala	Asp	Glu	Glu	Gln	Lys

<213> Homo sapiens

<400> 2738

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      20           25           30
Ile Val Asp Gln Cys Glu Arg Leu Gln Leu Gln Ser Ala Ala Ile Thr
      35           40           45
Lys Tyr Val Ala Asp Val Leu Pro Gly Lys Asn Gln Arg Ala Val Ser
      50           55           60
Met Ala Ser Ala Ala Arg Glu Leu Val Ile Gln Arg Leu Ser Leu Val
      65           70           75
Arg Ser Leu Cys Glu Ser Glu Glu Gln Arg Leu Leu Glu Gln Val His
      85           90           95
Gly Glu Glu Glu Arg Ala His Gln Ser Ile Leu Thr Gln Arg Val His
      100          105          110
Trp Ala Glu Ala Leu Gln Lys Leu Asp Thr Ile Arg Thr Gly Leu Val
      115          120          125
Gly Met Leu Thr His Leu Asp Asp Leu Gln Leu Ile Gln Lys Glu Gln
      130          135          140
Glu Ile Phe Glu Arg Thr Glu Glu Ala Glu Gly Ile Leu Asp Pro Gln
      145          150          155
Glu Ser Glu Met Leu Asn Phe Asn Glu Lys Cys Thr Arg Ser Pro Leu
      165          170          175
Leu Thr Gln Leu Trp Ala Thr Ala Val Leu Gly Ser Leu Ser Gly Thr
      180          185          190
Glu Asp Ile Arg Ile Asp Glu Arg Thr Val Ser Pro Phe Leu Gln Leu
      195          200          205
Ser Asp Asp Arg Lys Thr Leu Thr Ser Ala Pro Arg Ser Gln Arg Cys
      210          215          220
Ala Asp Gly Pro Glu Arg Phe Asp His Trp Pro Asn Ala Leu Ala Ala
      225          230          235
Thr Ser Phe Gln Asn Gly Leu His Ala Trp Met Val Asn Val Gln Asn
      245          250          255
Ser Cys Ala Tyr Lys Val Gly Val Ala Ser Gly His Leu Pro Arg Lys
      260          265          270
Gly Ser Gly Ser Asp Cys Arg Leu Gly His Asn Ala Phe Ser Trp Val
      275          280          285
Phe Ser Arg Tyr Asp Gln Glu Phe Arg Phe Ser
      290          295

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<210> 2739

<211> 1501

<212> DNA

<213> Homo sapiens

<400> 2739

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 120
ttctctctcg gcttctgctg gctgagtcgc gcgctgcagg atctgcaagc cacggaggcc
 180

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aattgcacgg tgctgtcggt gcagcagatc ggcgaggtgt tcgagtgcac cttcacctgt
240
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300
gagtcacact ctaggcgct gctgcacagc gacgagcacc agctcctgac caaccccaag
360
tgctcctata tccctcctg taagagagaa aatcagaaga atttgaaaag tgtcatgaat
420
tggcaacagt actggaaga tgagattggt tcccagccat ttacttgcta ttttaataca
480
catcaaagac cagatgatgt gcttctgcat cgcactcatg atgagattgt cctcctgcat
540
tgcttcctct ggcccctggt gacattttgt gtgggcgttc tcatttggtt cctgaccatc
600
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660
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720
cggaacctgt gtttctggc gcaggagatg gacagggccca cgacagggtc ctgagaggct
780
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840
ttccatctgc tgtagcaatg gctaaagggt caagatctta gctgtatgga gtaactattt
900
cagaaaaacc tataagaagt tcattttctt tcaaaagtaa cagtataatta ttgtacagt
960
gtagtataca aaccattatg atttatgcta cttaaaaaa ttaaaataga gtggtctgtg
1020
ttattttcta tttccttttt tatgcttaga acaccagggt tttaaaaaa aaaaaagggtg
1080
aggacatctg ggtctcattt gcttctgcta ggttaacctt ttacttgaca acaaggattc
1140
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1200
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1260
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1320
taaccattat ttttcaccag attacttctt aagagaggga ggtgattctg aagaaggctt
1380
ctatctcaaa aagcactggg cttccttatt catctgttct tgtgtgtttt gacggagtta
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1500
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1501

<210> 2740

<211> 218

<212> PRT

<213> Homo sapiens

<400> 2740

Glu Ser Arg Arg Glu Trp Gly Ala Met Ala Lys Leu Arg Val Ala Tyr

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	20	25	30
Ile Ile Ser Gly Val Val Ser Leu Phe Ile Phe Gly Phe Cys Trp Leu			
	35	40	45
Ser Pro Ala Leu Gln Asp Leu Gln Ala Thr Glu Ala Asn Cys Thr Val			
	50	55	60
Leu Ser Val Gln Gln Ile Gly Glu Val Phe Glu Cys Thr Phe Thr Cys			
	65	70	75
Gly Ala Asp Cys Arg Gly Thr Ser Gln Tyr Pro Cys Val Gln Val Tyr			
	85	90	95
Val Asn Asn Ser Glu Ser Asn Ser Arg Ala Leu Leu His Ser Asp Glu			
	100	105	110
His Gln Leu Leu Thr Asn Pro Lys Cys Ser Tyr Ile Pro Pro Cys Lys			
	115	120	125
Arg Glu Asn Gln Lys Asn Leu Glu Ser Val Met Asn Trp Gln Gln Tyr			
	130	135	140
Trp Lys Asp Glu Ile Gly Ser Gln Pro Phe Thr Cys Tyr Phe Asn Gln			
	145	150	155
His Gln Arg Pro Asp Asp Val Leu Leu His Arg Thr His Asp Glu Ile			
	165	170	175
Val Leu Leu His Cys Phe Leu Trp Pro Leu Val Thr Phe Val Val Gly			
	180	185	190
Val Leu Ile Val Val Leu Thr Ile Cys Ala Lys Ser Leu Ala Val Lys			
	195	200	205
Ala Glu Ala Met Lys Lys Arg Lys Phe Ser			
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<210> 2741

<211> 1487

<212> DNA

<213> Homo sapiens

<400> 2741

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120
tcctacaagg actggtctca gaacatgtat ttcaactgct cagaagacaa ccccgatcga
180
gagcgctgct ctgtgcctta ctctgtgtgc ttgcctactc ctgaccaggc agtgatecaac
240
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300
accaatggct gtattgacaa gttggtcaac tggatacaca gcaacctatt cttacttggt
360
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420
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480
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540
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600

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 720
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 780
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 840
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 1020
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 1080
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 1140
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 1200
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 1260
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 1320
 gcagaggaga agtggttaaca cccccacccc attccctgc atcggagctc agtattccta
 1380
 cagggtaaga ggtaggaatc ttgctgggac gaggggagcc agaagtggca ataaaaagcgt
 1440
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 1487

<210> 2742

<211> 163

<212> PRT

<213> Homo sapiens

<400> 2742

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 Tyr Arg Asp Asp Leu Asp Leu Gln Asn Leu Ile Asp Phe Gly Gln Lys
 20 25 30
 Lys Phe Ser Cys Cys Gly Gly Ile Ser Tyr Lys Asp Trp Ser Gln Asn
 35 40 45
 Met Tyr Phe Asn Cys Ser Glu Asp Asn Pro Ser Arg Glu Arg Cys Ser
 50 55 60
 Val Pro Tyr Ser Cys Cys Leu Pro Thr Pro Asp Gln Ala Val Ile Asn
 65 70 75 80
 Thr Met Cys Gly Gln Gly Met Gln Ala Phe Asp Tyr Leu Glu Ala Ser
 85 90 95
 Lys Val Ile Tyr Thr Asn Gly Cys Ile Asp Lys Leu Val Asn Trp Ile
 100 105 110
 His Ser Asn Leu Phe Leu Leu Gly Gly Val Ala Leu Gly Leu Ala Ile
 115 120 125
 Pro Gln Leu Val Gly Ile Leu Leu Ser Gln Ile Leu Val Asn Gln Ile

130 135 140
 Lys Asp Gln Ile Lys Leu Gln Leu Tyr Asn Gln Gln His Arg Ala Asp
 145 150 155 160
 Pro Trp Tyr

<210> 2743
 <211> 384
 <212> DNA
 <213> Homo sapiens

<400> 2743
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 120
 acagcctccc aagactcagg tgtccagtct ccacctggag cctccagaga ctggagtgtc
 180
 ccattctccgc ccagagccta ccaagactga ggtgtccagt ctccacctgg agcctccga
 240
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 360
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 384

<210> 2744
 <211> 69
 <212> PRT
 <213> Homo sapiens

<400> 2744
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 Asp Trp Ser Val Pro Ser Pro Pro Thr Ala Ser Gln Asp Ser Gly Val
 35 40 45
 Gln Ser Pro Pro Gly Ala Ser Arg Asp Trp Ser Val Pro Ser Pro Pro
 50 55 60
 Arg Ala Tyr Gln Asp
 65

<210> 2745
 <211> 769
 <212> DNA
 <213> Homo sapiens

<400> 2745
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 120

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agtatcacct gagaaaatta ggcattcccc tcttggaac acgtctctgt gagtttgcac
180
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240
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caaaggcctg tctgggcccc tctggggctg aggacacaca gatacataat gacacctgca
360
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420
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480
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540
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600
cacaccacag ccaggagggg cctttcccat ctgggagaga aacttccaga ccagccctc
660
ataccacagc caagaggggc ctttctcacc tggagagaaa cttccagacc agccctcac
720
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769

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<210> 2746

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2746

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Met Ser Trp Gly His Leu Leu Ser Leu Ile Asp Ala Glu Ser Ile Gln
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      20             25             30
Ser Gly Glu Lys Leu Pro Asp Gln Pro Phe Thr His His Ser Gln Glu
      35             40             45
Gly Pro Phe Pro Pro Gly Arg Glu Thr Ser Arg Pro Ala Pro His Thr
      50             55             60
Thr Ala Lys Arg Gly Leu Ser His Leu Glu Arg Asn Phe Gln Thr Ser
      65             70             75             80
Pro Ser His His Ser Gln Glu Gly Pro Phe Pro Pro Gly Glu Lys Leu
      85             90             95
Pro Asp

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<210> 2747

<211> 1100

<212> DNA

<213> Homo sapiens

<400> 2747

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120

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 180
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 240
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 300
 gctcgcaagc acctagccga gaagaagacg atgaccaacc ccacgaccgt catcgaggtc
 360
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 420
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 480
 aagctttcca atgacctgaa tggagccgtg gaggatgcaa agacggcccc gctgttcaac
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 720
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<212> PRT

<213> Homo sapiens

<400> 2748

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<211> 332

<212> PRT

<213> Homo sapiens

<400> 2750

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 Glu Val Thr Pro Asp Arg Ser Met Ile Ala Ala Ala Val Gln Pro Val
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 Ser Leu Gly Tyr Gln His Ile Arg Met Tyr Asp Leu Asn Ser Asn Asn
 65 70 75 80
 Pro Asn Pro Ile Ile Ser Tyr Asp Gly Val Asn Lys Asn Ile Ala Ser

	85		90		95
Val Gly Phe His Glu Asp Gly Arg Trp Met Tyr Thr Gly Gly Glu Asp					
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Cys Thr Ala Arg Ile Trp Asp Leu Arg Ser Arg Asn Leu Gln Cys Gln					
	115		120		125
Arg Ile Phe Gln Val Asn Ala Pro Ile Asn Cys Val Cys Leu His Pro					
	130		135		140
Asn Gln Ala Glu Leu Ile Val Gly Asp Gln Ser Gly Ala Ile His Ile					
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Trp Asp Leu Lys Thr Asp His Asn Glu Gln Leu Ile Pro Glu Pro Glu					
	165		170		175
Val Ser Ile Thr Ser Ala His Ile Asp Pro Asp Ala Ser Tyr Met Ala					
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Ala Val Asn Ser Thr Gly Asn Cys Tyr Val Trp Asn Leu Thr Gly Gly					
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Ile Gly Asp Glu Val Thr Gln Leu Ile Pro Lys Thr Lys Ile Pro Ala					
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His Thr Arg Tyr Ala Leu Gln Cys Arg Phe Ser Pro Asp Ser Thr Leu					
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Leu Ala Thr Cys Ser Ala Asp Gln Thr Cys Lys Ile Trp Arg Thr Ser					
	245		250		255
Asn Phe Ser Leu Met Thr Glu Leu Ser Ile Lys Ser Gly Asn Pro Gly					
	260		265		270
Glu Ser Ser Arg Gly Trp Met Trp Gly Cys Ala Phe Ser Gly Asp Ser					
	275		280		285
Gln Tyr Ile Val Thr Ala Ser Ser Asp Asn Leu Ala Arg Leu Trp Cys					
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<210> 2751

<211> 1877

<212> DNA

<213> Homo sapiens

<400> 2751

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<211> 87

<212> PRT

<213> Homo sapiens

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 35 40 45
 Pro Pro Pro Thr Thr Arg Thr Val Ala Ser Ser Gly Thr His Thr Ser
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<210> 2753

<211> 2561

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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 65          70          75          80
Gly Phe Val Phe Thr Ala Arg Thr Pro Phe Ser Val Ile Ile Glu Ala
 85          90          95
Met Gly Gln Glu Gln Thr Phe Gly Ile Leu Asn Val Leu Glu Phe Ser
100          105          110
Ser Asp Arg Lys Arg Met Ser Val Ile Val Arg Thr Pro Ser Gly Arg
115          120          125
Leu Arg Leu Tyr Cys Lys Gly Ala Asp Asn Val Ile Phe Glu Arg Leu
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Ser Lys Asp Ser Lys Tyr Met Glu Glu Thr Leu Cys His Leu Glu Tyr
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Phe Ala Thr Glu Gly Leu Arg Thr Leu Cys Val Ala Tyr Ala Asp Leu
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Ser Glu Gly Asn Glu Tyr Glu Glu Trp Leu Lys Val Tyr Gln Glu Ala
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Ser Thr Ile Leu Lys Asp Arg Ala Gln Arg Leu Glu Glu Cys Tyr Glu
195          200          205
Ile Ile Glu Lys Asn Leu Leu Leu Leu Gly Ala Thr Ala Ile Glu Asp
210          215          220
Arg Leu Gln Ala Gly Val Pro Glu Thr Ile Ala Thr Leu Leu Lys Ala
225          230          235          240
Glu Ile Lys Ile Trp Val Leu Thr Gly Asp Lys Gln Glu Thr Ala Ile
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<210> 2755

<211> 4795

<212> DNA

<213> Homo sapiens

<400> 2755

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2760
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3180
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3300
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3360

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 3540
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 3660
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 3720
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 3840
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<210> 2756

<211> 550

<212> PRT

<213> Homo sapiens

<400> 2756

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Ile Arg Ser Tyr Arg Asp Val Met Lys Leu Cys Ala Ala His Leu Pro
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Thr Glu Ser Asp Ala Pro Asn His Tyr Gln Ala Val Cys Arg Ala Leu
20      25      30
Phe Ala Glu Thr Met Glu Leu His Thr Phe Leu Thr Lys Ile Lys Ser
35      40      45
Ala Lys Glu Asn Leu Lys Lys Ile Gln Glu Met Glu Lys Ser Asp Glu
50      55      60
Ser Ser Thr Asp Leu Glu Glu Leu Lys Asn Ala Asp Trp Ala Arg Phe
65      70      75
Trp Val Gln Val Met Arg Asp Leu Arg Asn Gly Val Lys Leu Lys Lys
85      90      95
Val Gln Glu Arg Gln Tyr Asn Pro Leu Pro Ile Glu Tyr Gln Leu Thr
100     105     110
Pro Tyr Glu Met Leu Met Asp Asp Ile Arg Cys Lys Arg Tyr Thr Leu
115     120     125
Arg Lys Val Met Val Asn Gly Asp Ile Pro Pro Arg Leu Lys Lys Ser
130     135     140
Ala His Glu Ile Ile Leu Asp Phe Ile Arg Ser Arg Pro Pro Leu Asn
145     150     155
Pro Val Ser Ala Arg Lys Leu Lys Pro Thr Pro Pro Arg Pro Arg Ser
165     170     175
Leu His Glu Arg Ile Leu Glu Glu Ile Lys Ala Glu Arg Lys Leu Arg
180     185     190
Pro Val Ser Pro Glu Glu Ile Arg Arg Ser Arg Leu Asp Val Thr Thr
195     200     205
Pro Glu Ser Thr Lys Asn Leu Val Glu Ser Ser Met Val Asn Gly Gly
210     215     220
Leu Thr Ser Gln Thr Lys Glu Asn Gly Leu Ser Thr Ser Gln Gln Val
225     230     235
Pro Ala Gln Arg Lys Lys Leu Leu Arg Ala Pro Thr Leu Ala Glu Leu
245     250     255
Asp Ser Ser Glu Ser Glu Glu Glu Thr Leu His Lys Ser Thr Ser Ser
260     265     270
Ser Ser Val Ser Pro Ser Phe Pro Glu Glu Pro Val Leu Glu Ala Val
275     280     285
Ser Thr Arg Lys Lys Pro Pro Lys Phe Leu Pro Ile Ser Ser Thr Pro
290     295     300
Gln Pro Glu Arg Arg Gln Pro Pro Gln Arg Arg His Ser Ile Glu Lys
305     310     315
Glu Thr Pro Thr Asn Val Arg Gln Phe Leu Pro Pro Ser Arg Gln Ser
325     330     335
Ser Arg Ser Leu Glu Glu Phe Cys Tyr Pro Val Glu Cys Leu Ala Leu
340     345     350
Thr Val Glu Glu Val Met His Ile Arg Gln Val Leu Val Lys Ala Glu
355     360     365
Leu Glu Lys Tyr Gln Gln Tyr Lys Asp Ile Tyr Thr Ala Leu Lys Lys
370     375     380
Gly Lys Leu Cys Phe Cys Cys Arg Thr Arg Arg Phe Ser Phe Phe Thr
385     390     395
Trp Ser Tyr Thr Cys Gln Phe Cys Lys Arg Pro Val Cys Ser Gln Cys
405     410     415
Cys Lys Lys Met Arg Leu Pro Ser Lys Pro Tyr Ser Thr Leu Pro Ile

```

```

          420          425          430
Phe Ser Leu Gly Pro Ser Ala Leu Gln Arg Gly Glu Ser Ser Met Arg
    435          440          445
Ser Glu Lys Pro Ser Thr Ala His His Arg Pro Leu Arg Ser Ile Ala
    450          455          460
Arg Phe Ser Ser Lys Ser Lys Ser Met Asp Lys Ser Asp Glu Glu Leu
    465          470          475          480
Gln Phe Pro Lys Glu Leu Met Glu Asp Trp Ser Thr Met Glu Val Cys
          485          490          495
Val Asp Cys Lys Lys Phe Ile Ser Glu Ile Ile Ser Ser Ser Arg Arg
    500          505          510
Ser Leu Val Leu Ala Asn Lys Arg Ala Arg Leu Lys Arg Lys Thr Gln
    515          520          525
Ser Phe Tyr Met Ser Ser Pro Gly Pro Ser Glu Tyr Cys Pro Ser Glu
    530          535          540
Arg Thr Ile Ser Glu Ile
    545          550

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<210> 2757

<211> 449

<212> DNA

<213> Homo sapiens

<400> 2757

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120
ggttttaata gttttcagat gtttcaagtg ttgtgaacag agacttggtt ggattatgca
180
tttctcagct agactaaata aatgctagca atggatacgt gcaaacaatg tgggcagctg
240
cagcttgctc aagaccattc cagcctcaac cctcagaaat ggcactgtgt ggactgcaac
300
acgaccagtg ccatttgggc ttgccttagc tgctcccatg ttgccttggt aagatatatt
360
gaagagcatg cactcaagca ctttcaagaa agcagtcacg ctgttgcatg ggaggtgaat
420
gagatgtacg ttttttgta ctttgtga
449

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<210> 2758

<211> 82

<212> PRT

<213> Homo sapiens

<400> 2758

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Met Leu Ala Met Asp Thr Cys Lys His Val Gly Gln Leu Gln Leu Ala
  1          5          10          15
Gln Asp His Ser Ser Leu Asn Pro Gln Lys Trp His Cys Val Asp Cys
    20          25          30
Asn Thr Thr Glu Ser Ile Trp Ala Cys Leu Ser Cys Ser His Val Ala
    35          40          45
Cys Gly Arg Tyr Ile Glu Glu His Ala Leu Lys His Phe Gln Glu Ser

```

```

      50              55              60
Ser His Pro Val Ala Leu Glu Val Asn Glu Met Tyr Val Phe Cys Tyr
65              70              75              80
Leu Cys

```

```

<210> 2759
<211> 688
<212> DNA
<213> Homo sapiens

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<400> 2759
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gagaccaagc ccagccaagg tcccgtgat ggttccggc ctgagcccca gcgcccacga
120
aaccgcccct acttccagcg gagacggcag caggcccctg gccccacga ggcctctggc
180
ccccggcagc ccgcagcccc tgagacctca gcccctgtca acagtgggga cccaccacc
240
accatcctgg agtgattcca actcaactca aaggacacc agagctgcca tctggtatct
300
gccagttttt ccaaatgacc tgtaccctac ccagtaccct gctccccctt tcccataat
360
catgacatca aaacatcagc ttttcacctt ttccttgaga ctcaggaggg ccaaagcaac
420
agcctttggc tttttctct ttttcttccc tctcccctag catgggttga aggaagggag
480
ccatccttac tgttcagaga cagcaactcc ctcccgtaac tcaggctgag aaggaaccag
540
ccagctctta cctcctcctg gttgcttttc ttgccccac cccaagtta ttttgtttt
600
ccccggccc cctacctctg aagccatttt atgatctgtc atgtgccacc tgagcctcca
660
gtaaaaacaa aaacaggaaa aaaaaaaa
688

```

```

<210> 2760
<211> 84
<212> PRT
<213> Homo sapiens

```

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<400> 2760
Tyr Arg Ser Pro Phe Arg Pro Arg Pro Arg Gln Gln Pro Thr Thr Glu
1      5      10      15
Gly Gly Asp Gly Glu Thr Lys Pro Ser Gln Gly Pro Ala Asp Gly Ser
20     25     30
Arg Pro Glu Pro Gln Arg Pro Arg Asn Arg Pro Tyr Phe Gln Arg Arg
35     40     45
Arg Gln Gln Ala Pro Gly Pro Gln Gln Ala Pro Gly Pro Arg Gln Pro
50     55     60
Ala Ala Pro Glu Thr Ser Ala Pro Val Asn Ser Gly Asp Pro Thr Thr
65     70     75     80
Thr Ile Leu Glu

```

<210> 2761
 <211> 922
 <212> DNA
 <213> Homo sapiens

<400> 2761
 acgcgtgaag ggccacaggt atctgaaaat ttgcagaaaa cagaattaag tgatggaaaa
 60
 agtattgaac cagggggaat agacattacc cttagtagtt ctctttccca ggcggtgat
 120
 cccataactg agggcaataa agagccagat aagacctggg tgaanaaggg agagccccctc
 180
 ccggtaaaac tgaactcttc tacagaagca aatgtgatta aagaggctct agactcctct
 240
 ttggaatcta ctctggacaa cagctgtcaa ggtgcacaaa tggataataa atctgaagtt
 300
 cagttgtggc tgtaaagag aattcaggta ccattgaag atatacttcc ttcaaaagaa
 360
 gaaaaagca agacccccacc catgttcctg tgcatacaag tgggaaaacc aatgagaaaa
 420
 tcctttgcca ctacactgc agccatggtc cagcagtacg gcaaacggag aaagcagcca
 480
 gagtactggt ttgtgttcc tcgggagagg gtggatcatt tgtacacatt ctttgttcag
 540
 tggctctccc atgtctatgg aaaagatgcc aaagagcaag gctttgtggt ggtggagagg
 600
 gaagaactga acatgattga caacttcttc agtgagccaa caaccaagag ctgggagatc
 660
 atcactgttg aagaggcaaa gcgcaggaag agcacatgca gctactatga agacgaggac
 720
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 780
 cgctgggccc gcccttttc tgcaagggtg caagggtatc catggagact ggcctatagc
 840
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 900
 cctgtcctat tggatcatca ag
 922

<210> 2762
 <211> 307
 <212> PRT
 <213> Homo sapiens

<400> 2762
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 1 5 10 15
 Ser Asp Gly Lys Ser Ile Glu Pro Gly Gly Ile Asp Ile Thr Leu Ser
 20 25 30
 Ser Ser Leu Ser Gln Ala Gly Asp Pro Ile Thr Glu Gly Asn Lys Glu
 35 40 45
 Pro Asp Lys Thr Trp Val Lys Lys Gly Glu Pro Leu Pro Val Lys Leu


```

      50              55              60
Asn Ser Ser Thr Glu Ala Asn Val Ile Lys Glu Ala Leu Asp Ser Ser
65      70      75      80
Leu Glu Ser Thr Leu Asp Asn Ser Cys Gln Gly Ala Gln Met Asp Asn
      85      90      95
Lys Ser Glu Val Gln Leu Trp Leu Leu Lys Arg Ile Gln Val Pro Ile
      100      105      110
Glu Asp Ile Leu Pro Ser Lys Glu Lys Ser Lys Thr Pro Pro Met
      115      120      125
Phe Leu Cys Ile Lys Val Gly Lys Pro Met Arg Lys Ser Phe Ala Thr
      130      135      140
His Thr Ala Ala Met Val Gln Gln Tyr Gly Lys Arg Arg Lys Gln Pro
      145      150      155
Glu Tyr Trp Phe Ala Val Pro Arg Glu Arg Val Asp His Leu Tyr Thr
      160      165      170
Phe Phe Val Gln Trp Ser Pro Asp Val Tyr Gly Lys Asp Ala Lys Glu
      180      185      190
Gln Gly Phe Val Val Val Glu Lys Glu Glu Leu Asn Met Ile Asp Asn
      195      200      205
Phe Phe Ser Glu Pro Thr Thr Lys Ser Trp Glu Ile Ile Thr Val Glu
      210      215      220
Glu Ala Lys Arg Arg Lys Ser Thr Cys Ser Tyr Tyr Glu Asp Glu Asp
      225      230      235
Glu Glu Val Leu Pro Val Leu Arg Pro Pro Arg Ala Phe Trp Glu Asn
      240      245      250
Lys Pro Leu Asn Arg Trp Ala Arg Pro Phe Pro Ala Arg Val Gln Gly
      255      260      265
Tyr Pro Trp Arg Leu Ala Tyr Ser Thr Leu Glu His Gly Thr Ser Leu
      270      275      280
Lys Thr Leu Tyr Arg Lys Ser Ala Ser Leu Asp Ser Pro Val Leu Leu
      285      290      295
Val Ile Lys
305

```

<210> 2763

<211> 2210

<212> DNA

<213> Homo sapiens

<400> 2763

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120
caaacagtcc agtctctgag accacacagg gtacatctag aggggttctac ttgcatcacc
180
cacacttcca ctctgtgtaa acaactgtct tgggcatgag aagggccagg ataggccagg
240
tgaatggcag gctgccaac aacccaatc ccaaaccaac ctccaggccc atgggcccac
300
gtccctgag gaagatgcta ataggtagaa caggtagaac atgtagacac aaacatctag
360
tttatttttt ctgactgtaa ccaaagtcag caaaagaac aacaaaactt cagtgcctta
420

```

gaaatcctcc tggattcaat gacaacacat caatggccgg gcacaggggt ggattccttt
480
tatgaaatca ccttataatc tctcatcacc ccaggacagt gcctttttggg actgcatgaa
540
tctttaaatg ctacaccaca ttttctcacc cttaagtta tgacagacag gttatctctc
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660
cacgacatca ttcataaata actgtggagt ctgggatgct ggctgaaggc atctccagga
720
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780
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900
tctgtgagct gtattcgcat cagcgccgga gcctcagaaa gaatcgctgt ttacactctg
960
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1020
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1080
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1140
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1200
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1260
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1440
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1680
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1740
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1800
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1920
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1980
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2040

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 2160
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<210> 2764

<211> 423

<212> PRT

<213> Homo sapiens

<400> 2764

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Gly	Val	Ile	Asp	Pro	Gly	Met	Glu	Tyr	Val	Pro	Pro	Pro	Ala	Gly	Ser
			20					25					30		
Val	Ala	Ser	Gly	Pro	Val	Val	Gly	Gly	Arg	Lys	Lys	Val	Arg	Gly	Pro
			35				40					45			
Glu	Gln	Ile	Lys	Gln	Glu	Val	Glu	Ser	Glu	Glu	Glu	Lys	Pro	Asp	Arg
			50			55					60				
Met	Asp	Ile	Asp	Ser	Glu	Asp	Thr	Asp	Ser	Asn	Thr	Ser	Leu	Gln	Thr
					70					75				80	
Arg	Ala	Arg	Glu	Lys	Arg	Lys	Pro	Gln	Leu	Glu	Lys	Asp	Thr	Lys	Pro
			85						90					95	
Lys	Glu	Pro	Arg	Tyr	Thr	Pro	Val	Ser	Ile	Tyr	Glu	Glu	Lys	Leu	Leu
			100					105					110		
Leu	Lys	Arg	Leu	Glu	Ala	Cys	Pro	Gly	Ala	Val	Ala	Met	Thr	Pro	Glu
			115				120					125			
Ala	Arg	Arg	Leu	Lys	Arg	Lys	Leu	Ile	Val	Arg	Gln	Ala	Lys	Arg	Asp
			130			135					140				
Arg	Gly	Leu	Pro	Leu	Phe	Asp	Leu	Asp	Gln	Val	Val	Asn	Ala	Ala	Leu
					150					155				160	
Leu	Leu	Val	Asp	Gly	Ile	Tyr	Gly	Ala	Lys	Glu	Gly	Gly	Ile	Ser	Arg
			165					170						175	
Leu	Pro	Ala	Gly	Gln	Ala	Thr	Tyr	Arg	Thr	Thr	Cys	Gln	Asp	Phe	Arg
			180					185					190		
Ile	Leu	Asp	Arg	Tyr	Gln	Thr	Ser	Leu	Pro	Ser	Arg	Lys	Gly	Phe	Arg
			195				200					205			
His	Gln	Thr	Thr	Lys	Phe	Leu	Tyr	Arg	Leu	Val	Gly	Ser	Glu	Asp	Met
			210			215					220				
Ala	Val	Asp	Gln	Ser	Ile	Val	Ser	Pro	Tyr	Thr	Ser	Arg	Ile	Leu	Lys
					230					235				240	
Pro	Tyr	Ile	Arg	Arg	Asp	Tyr	Glu	Thr	Lys	Pro	Pro	Lys	Leu	Gln	Leu
			245						250					255	
Leu	Ser	Gln	Ile	Arg	Ser	His	Leu	His	Arg	Ser	Asp	Pro	His	Trp	Thr
			260				265						270		
Pro	Glu	Pro	Asp	Ala	Pro	Leu	Asp	Tyr	Cys	Tyr	Val	Arg	Pro	Asn	His
			275				280					285			
Ile	Pro	Thr	Ile	Asn	Ser	Met	Cys	Gln	Glu	Phe	Phe	Trp	Pro	Gly	Ile
			290			295					300				
Asp	Leu	Ser	Glu	Cys	Leu	Gln	Tyr	Pro	Asp	Phe	Ser	Val	Val	Val	Leu
					310					315					320
Tyr	Lys	Lys	Val	Ile	Ile	Ala	Phe	Gly	Phe	Met	Val	Pro	Asp	Val	Lys

```

          325          330          335
Tyr Asn Glu Ala Tyr Ile Ser Phe Leu Phe Val His Pro Glu Trp Arg
          340          345          350
Arg Ala Gly Ile Ala Thr Phe Met Ile Tyr His Leu Ile Gln Thr Cys
          355          360          365
Met Gly Lys Asp Val Thr Leu His Val Ser Ala Ser Asn Pro Ala Met
          370          375          380
Leu Leu Tyr Gln Lys Phe Gly Phe Lys Thr Glu Glu Tyr Val Leu Asp
          385          390          395          400
Phe Tyr Asp Lys Tyr Tyr Pro Leu Glu Ser Thr Glu Cys Lys His Ala
          405          410          415
Phe Phe Leu Arg Leu Arg Arg
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```

<210> 2765

<211> 582

<212> DNA

<213> Homo sapiens

<400> 2765

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tctgggtgtg gagccttatt attcaccact ttggcagggtg tctcagtggc ttacttaccc
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120
agtggagggg caggatggca cggccacttg gggcttgggg gcgctccggc tgccgtaccg
180
tggctgcaag cctaaaccgg gcttggggccc atcctgagca gccacagggtt tgttcagctc
240
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300
aagtccaaga agcaggcacc cgctgaccac cactgccccg atagtgtcag aggccagggc
360
aggggcgcgac ctgacctcca ggaaggcaga gaggttgtgc tgggagctgg ttgtgtccca
420
gcagagcaga ggcttctggc cagagcagtt gtctcggcgg atgtcgtgcc aggactccag
480
ggcacagttg cagtggcct gcaggtcaag gtcacagcgg gcggccagcg ccccatccac
540
acgagacaag gggttgcgta gcacgttcag gacctcaagc tt
582

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<210> 2766

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2766

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Met Gly Arg Trp Pro Pro Ala Val Thr Leu Thr Cys Arg Pro Thr Ala
1          5          10          15
Thr Val Pro Trp Ser Pro Gly Thr Thr Ser Ala Glu Thr Thr Ala Leu
20          25          30
Ala Arg Ser Leu Cys Ser Ala Gly Thr Gln Pro Ala Pro Ser Thr Thr
35          40          45
Ser Leu Pro Ser Trp Arg Ser Ala Ala Pro Leu Ala Trp Pro Leu Gln

```

50		55		60	
Leu	Ser	Gly	Gln	Trp	Trp
65			70		75
Ser	Leu	Ala	Leu	Cys	Trp
		85		90	
Glu	Ala	Gly	Ser		
		100			

<210> 2767

<211> 1202

<212> DNA

<213> Homo sapiens

<400> 2767

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<211> 282
<212> PRT
<213> Homo sapiens

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35 40 45
Ser Gln Glu Cys Leu Glu Ser Arg Val Thr Asn Gln Thr Leu Thr Lys
50 55 60
Ser Glu Gly Asp Phe Pro Val Pro Arg Val Gly Ser Arg Leu Glu Ser
65 70 75 80
Glu Glu Ala Glu Asp Pro Phe Pro Glu Glu Val Phe Pro Ala Val Gln
85 90 95
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Gly Ser Val Leu Pro Arg Ala Leu Val Leu Lys Ala Phe Ser Ser Ser
115 120 125
Ser Leu Asp Ala Ser Ser Asp Ser Ser Pro Val Ala Ser Pro Ser Ser
130 135 140
Pro Lys Arg Asn Phe Phe Ser Arg His Gln Ser Phe Thr Thr Lys Thr
145 150 155 160
Glu Lys Gly Lys Pro Ser Arg Glu Ile Lys Lys His Ser Met Ser Phe
165 170 175
Thr Phe Ala Pro His Lys Lys Val Leu Thr Lys Asn Leu Ser Ala Gly
180 185 190
Ser Gly Lys Ser Gln Asp Phe Thr Arg Asp His Val Pro Arg Gly Val
195 200 205
Arg Lys Glu Ser Gln Leu Ala Gly Arg Ile Val Gln Glu Asn Gly Cys
210 215 220
Glu Thr His Asn Gln Thr Ala Arg Gly Phe Cys Leu Arg Pro His Ala
225 230 235 240
Leu Ser Val Asp Asp Val Phe Gln Gly Ala Asp Trp Glu Arg Pro Gly
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<210> 2769
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<212> DNA
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<210> 2770

<211> 228

<212> PRT

<213> Homo sapiens

<400> 2770

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 20 25 30
 Asn Arg Ile Arg Val Arg Gln Asp Leu Ala Ser Leu Pro Ala Glu Leu

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      35              40              45
Ile Asn Gln Ile Gly Asn Arg Cys His Pro Lys Leu Tyr Asp Glu Gly
   50              55              60
Asp Pro Ser Glu Lys Leu Glu Leu Val Thr Gly Thr Asn Val Tyr Ile
   65              70              75              80
Thr Arg Ala Gln Leu Met Asn Cys His Val Ser Ala Gly Thr Arg His
      85              90              95
Lys Val Leu Leu Arg Arg Leu Leu Ala Ser Phe Phe Asp Arg Asn Thr
   100              105              110
Leu Ala Asn Ser Cys Gly Thr Gly Ile Arg Ser Ser Thr Asn Asp Pro
   115              120              125
Arg Arg Lys Pro Leu Asp Ser Arg Val Leu His Ala Val Lys Tyr Tyr
   130              135              140
Cys Gln Asn Phe Ala Pro Asn Phe Lys Glu Ser Glu Met Asn Ala Ile
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Ala Ala Asp Met Cys Thr Asn Ala Arg Arg Val Val Arg Lys Ser Trp
   165              170              175
Met Pro Lys Val Lys Val Leu Lys Ala Glu Asp Asp Ala Tyr Thr Thr
   180              185              190
Phe Ile Ser Glu Thr Gly Lys Ile Glu Pro Asp Met Met Gly Val Glu
   195              200              205
His Gly Phe Glu Thr Ala Ser His Glu Gly Glu Ala Gly Pro Ile Ala
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<210> 2771

<211> 1668

<212> DNA

<213> Homo sapiens

<400> 2771

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660

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<211> 258

<212> PRT

<213> Homo sapiens

<400> 2772

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			20					25					30		
Thr	Met	Ser	Thr	Val	Val	Glu	Leu	Asn	Val	Gly	Gly	Glu	Phe	His	Thr
			35					40				45			
Thr	Thr	Leu	Gly	Thr	Leu	Arg	Lys	Phe	Pro	Gly	Ser	Lys	Leu	Ala	Glu
			50			55				60					
Met	Phe	Ser	Ser	Leu	Ala	Lys	Ala	Ser	Thr	Asp	Ala	Glu	Gly	Arg	Phe
65					70				75					80	
Phe	Ile	Asp	Arg	Pro	Ser	Thr	Tyr	Phe	Arg	Pro	Ile	Leu	Asp	Tyr	Leu
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<400> 2774

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Glu Asp Ala Glu Glu Ser Leu Glu Glu Glu Glu Ala Leu Asp Pro Leu
           35           40           45
Gly Ile Met Arg Ser Lys Lys Pro Lys Lys His Pro Lys Val Ala Val
           50           55           60
Lys Ala Lys Pro Ser Pro Arg Leu Thr Ile Phe Asp Glu Glu Val Asp
           65           70           75           80
Pro Asp Glu Gly Leu Phe Gly Pro Gly Arg Lys Leu Ser Pro Gln Asp
           85           90           95
Pro Ser Glu Asp Val Ser Ser Met Asp Pro Leu Lys Leu Phe Asp Asp
           100          105          110
Pro Asp Leu Gly Gly Ala Ile Pro Leu Gly Asp Ser Leu Leu Leu Pro
           115          120          125
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<210> 2775

<211> 3139

<212> DNA

<213> Homo sapiens

<400> 2775

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780

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<212> PRT

<213> Homo sapiens

<400> 2776

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			20				25						30		
Tyr	Gly	Ser	Phe	Pro	Ile	Phe	Ile	Ser	Ala	Leu	Leu	Phe	Gly	Asn	Phe
			35				40					45			
Trp	Thr	His	Pro	Ile	Thr	Asp	Gln	Leu	Arg	Ala	Met	Asn	Lys	Ala	Ala
			50			55				60					
His	Gln	Glu	Ser	Thr	Glu	His	Val	Leu	Ser	Gly	Gly	Val	Val	Val	Ser
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				85					90					95	
Arg	Gly	Gln	Lys	Gly	Thr	Leu	Ile	Gly	Tyr	Ser	Pro	Glu	Gly	Thr	Pro
			100					105					110		
Leu	Tyr	Asn	Phe	Met	Gly	Asp	Ala	Phe	Gln	His	Ser	Ser	Gln	Ser	Ile
			115				120					125			
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Ser	Arg	Gln	Ile	Phe	Tyr	Phe	Leu	Cys	Leu	Asn	Leu	Leu	Phe	Thr	Phe
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Phe	Ala	Ala	Leu	Met	Ser	Arg	Trp	Lys	Ala	Thr	Arg	Ile	Phe	Ser	Tyr				
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225				230				235											
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305				310				315											
Val	Ile	Ser	Thr	Cys	Phe	Gly	Arg	Tyr	Ser	Trp	Gln	His	Trp	Cys	Asp				
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Thr	Leu	Phe	Ser	Phe	Tyr	Cys	Tyr	Ile	Asn	Ile	Ser	Gln	Cys	Cys	Ser				
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<211> 8625
<212> DNA
<213> Homo sapiens
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600

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<211> 720

<212> PRT

<213> Homo sapiens

<400> 2780

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Val	Thr	Gly	Ile	Arg	Arg	Met	Arg	Phe	Lys	Gly	Leu	Ala	Gly	Val	Asp
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Ser	Ser	Leu	Glu	Val	Val	Ser	Leu	Leu	Pro	Pro	Arg	Ser	Phe	Ser	Leu
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Pro	Ser	Pro	Ala	Leu	Glu	Glu	Arg	Lys	Thr	Asp	Ser	Tyr	Arg	Tyr	Pro					
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Ser	Tyr	Glu	Ala	Ala	Gly	Glu	Ile	Val	Arg	Leu	Thr	Thr	Pro	Gly	Phe					

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Gly Pro Asp Asp Pro Leu His Lys Gln Pro Arg Phe Trp Ala Ser				
	660	665	670	
Met Met Glu Ala Ala Ser Cys Pro Pro Asp Tyr Val Pro Pro Glu Ile				
	675	680	685	
Phe His Phe His Thr Arg Ser Asp Val Arg Leu Tyr Gly Met Ile Tyr				
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<210> 2781

<211> 1268

<212> DNA

<213> Homo sapiens

<400> 2781

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<211> 314

<212> PRT

<213> Homo sapiens

<400> 2782

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			20					25					30		
Ala	Arg	Thr	Gly	Leu	Arg	Ile	Cys	Asp	Leu	Leu	Ser	Asp	Phe	Asp	Glu
			35				40					45			
Phe	Ser	Ser	Arg	Phe	Lys	Asn	Leu	Ala	His	Gln	His	Gln	Ser	Met	Phe
			50			55				60					
Pro	Thr	Leu	Glu	Ile	Asp	Ile	Glu	Gly	Gln	Leu	Lys	Arg	Leu	Lys	Gly
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Phe	Ala	Glu	Arg	Ile	Arg	Pro	Met	Val	Arg	Asp	Gly	Val	Tyr	Phe	Met
			85					90						95	
Tyr	Glu	Ala	Leu	His	Gly	Pro	Pro	Lys	Lys	Ile	Leu	Val	Glu	Gly	Ala
			100					105					110		
Asn	Ala	Ala	Leu	Leu	Asp	Ile	Asp	Phe	Gly	Thr	Tyr	Pro	Phe	Val	Thr
			115			120						125			
Ser	Ser	Asn	Cys	Thr	Val	Gly	Gly	Val	Cys	Thr	Gly	Leu	Gly	Ile	Pro
			130			135				140					
Pro	Gln	Asn	Ile	Gly	Asp	Val	Tyr	Gly	Val	Val	Lys	Ala	Tyr	Thr	Thr
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Arg	Val	Gly	Ile	Gly	Ala	Phe	Pro	Thr	Glu	Gln	Ile	Asn	Glu	Ile	Gly
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Gly	Leu	Leu	Gln	Thr	Arg	Gly	His	Glu	Trp	Gly	Val	Thr	Thr	Gly	Arg
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Lys	Arg	Arg	Cys	Gly	Trp	Leu	Asp	Leu	Met	Ile	Leu	Arg	Tyr	Ala	His
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Met	Val	Asn	Gly	Phe	Thr	Ala	Leu	Ala	Leu	Thr	Lys	Leu	Asp	Ile	Leu
			210			215				220					
Asp	Val	Leu	Gly	Glu	Val	Lys	Val	Gly	Val	Ser	Tyr	Lys	Leu	Asn	Gly
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Lys	Arg	Ile	Pro	Tyr	Phe	Pro	Ala	Asn	Gln	Glu	Met	Leu	Gln	Lys	Val
			245					250					255		
Glu	Val	Glu	Tyr	Glu	Thr	Leu	Pro	Gly	Trp	Lys	Ala	Asp	Thr	Thr	Gly
			260					265					270		
Ala	Arg	Arg	Trp	Glu	Asp	Leu	Pro	Pro	Gln	Ala	Gln	Asn	Tyr	Ile	Arg
			275					280					285		
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 <211> 2376
 <212> DNA
 <213> Homo sapiens

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<210> 2784

<211> 361

<212> PRT

<213> Homo sapiens

<400> 2784

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 Ala Phe Leu Asp Met Val Arg Ser Leu Leu Asp Gly Asn Ile Asp Ser
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      115              120              125
Asn Ser Arg Ser Leu Leu Glu Ser Thr Tyr Gln Arg Lys Ala Glu Gln
      130              135              140
Leu Met Ser Asp Glu Asn Cys Phe Lys Leu Met Phe Ile Gln Ser Gln
      145              150              155              160
Gly Gln Val Gln Leu Thr Ile Glu Leu Leu Asp Thr Glu Glu Glu Asn
      165              170              175
Ser Asp Asp Pro Val Glu Ala Glu Arg Trp Ser Asp Tyr Val Glu Arg
      180              185              190
Tyr Met Asn Ser Asp Thr Thr Ser Pro Glu Leu Arg Glu His Leu Ala
      195              200              205
Gln Lys Pro Val Phe Leu Pro Arg Asn Leu Arg Arg Ile Arg Lys Cys
      210              215              220
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      225              230              235              240
Lys Lys Thr Met Glu Asn Val Asp Ser Leu Asp Lys Leu Glu Cys Arg
      245              250              255
Phe Lys Leu Asn Ser Tyr Lys Met Val Tyr Val Ile Lys Ser Glu Asp
      260              265              270
Tyr Met Tyr Arg Arg Thr Ala Leu Leu Arg Ala His Gln Ser His Glu
      275              280              285
Arg Val Ser Lys Arg Leu His Gln Arg Phe Gln Ala Trp Val Asp Lys
      290              295              300
Trp Thr Lys Glu His Val Pro Arg Glu Met Ala Ala Glu Thr Ser Lys
      305              310              315              320
Trp Leu Met Gly Glu Gly Leu Glu Gly Leu Val Pro Cys Thr Thr Thr
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<210> 2785

<211> 492

<212> DNA

<213> Homo sapiens

<400> 2785

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240
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360

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<210> 2786
 <211> 155
 <212> PRT
 <213> Homo sapiens

<400> 2786
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 50 55 60
 Asp Lys Ser Leu Ile His Thr Val Leu Leu Gln Lys Asp Tyr Gln Ala
 65 70 75 80
 Ser Glu Asp Lys Val Arg Gln Leu Val Lys Glu Ile Gly Arg Glu Ile
 85 90 95
 Gln Gln Leu Ser Met Ala Gly Cys Tyr Trp Leu Pro Gly Ser Thr Val
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<210> 2787
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 <212> DNA
 <213> Homo sapiens

<400> 2787
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 120
 acaatgcaca gacatggcag tatccttctg gtggggagga gtcaccattt gctctgccct
 180
 gccctctgct ggggtgctctt acaggtgcta ctgcatccag cgcttgaaac aattctgtgg
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 299

<210> 2788
 <211> 95
 <212> PRT

<213> Homo sapiens

<400> 2788

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Met Thr Arg Asp Ser Gly Met Lys Gln Lys His Ala Ala Ser Thr Ser
 1           5           10           15
Met Trp Gly Glu Glu Pro Tyr Ser Asp Ile Ser Val Ala Lys Thr Arg
           20           25           30
Ala Gly His Ala Thr Met His Arg His Gly Ser Ile Leu Leu Val Gly
           35           40           45
Gly Ser His His Leu Leu Cys Pro Ala Leu Cys Trp Val Leu Leu Gln
           50           55           60
Val Leu Leu His Pro Ala Leu Glu Thr Ile Leu Trp Gly Ile Asp Ser
65           70           75           80
Glu Glu Ile Thr Asp Gly Arg Asp Phe Leu Pro Gln Leu Thr Gln
           85           90           95

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<210> 2789

<211> 492

<212> DNA

<213> Homo sapiens

<400> 2789

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120
gcgaggccag gctgtgcagt ggggccagca ccagctgcag cttctcctcc agcagggtcca
180
ccctggactg cagcctctgc acttcttctc tcattgcact gtccactcct gcgggcagag
240
ccaggcgctg ggtcacggcc ggccggctcc ccaccacac cccagggtct cctcctgtc
300
cccagggaga ggcagagcca gaagactcag gccaggcct ctgccacccc cgctgcctgc
360
ctggcgctgg ccagaggtct caggctatgc cgcctaagta cgctggggcg ggtggctctg
420
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tcgttccgaa tt
492

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<210> 2790

<211> 141

<212> PRT

<213> Homo sapiens

<400> 2790

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Arg Lys Ser Ala Arg Ser Gly Ser Arg Cys Gly Arg Ala Ala Gly Arg
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Ser Ala Pro Gly Gly Cys Arg Gly Pro Gly Ala His Ala Pro Val Pro
           20           25           30
Ala Arg Pro Gly Cys Ala Val Gly Pro Ala Pro Ala Ala Ser Pro
           35           40           45
Pro Ala Gly Pro Pro Trp Thr Ala Ala Ser Ala Leu Leu Pro Ser Leu

```



```

      50              55              60
His Cys Pro Leu Leu Arg Ala Glu Pro Gly Ala Gly Ser Arg Pro Ala
65              70              75              80
Gly Ser Pro Pro Thr Pro Pro Gly Leu Pro Pro Val Pro Arg Glu Arg
      85              90              95
Gln Ser Gln Lys Thr Gln Ala Gln Ala Ser Ala Thr Pro Ala Ala Cys
      100              105              110
Leu Ala Leu Ala Arg Gly Leu Arg Leu Cys Arg Leu Ser Thr Ser Gly
      115              120              125
Arg Val Ala Leu Arg Arg Gly Ser Gly Ser Arg Pro Arg
      130              135              140

<210> 2791
<211> 1271
<212> DNA
<213> Homo sapiens

<400> 2791
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atagaggact ggataatata tttgtgtcct tctacatagt ggtatagaaa tatcaggctcc
120
ccaaattccc atttttcttc caatcacatt taaaatttca atatgtgtgca ggcagtatgt
180
gtaagattat atccaaatat ttactcctgg ttgctcctct tgggcaagct gtgaatatga
240
tcaaaatatt taaagaagga agaaggtaaa gatctaaat atgacatgaa aatacccaga
300
gaagtgtgcc taaattagca ttagggtttg agggatccta aggatgacaa aaagggactc
360
ttctattgaa ttcgtggttg atgctcagcg atagtaacaa tcttgctccc cctaacatct
420
tcctcccttc ccagcagctt cacagaacat ggttgatgag gtaacttagg ggatgcacag
480
ggtgtggcca gaagaccctt tccctatag accactatga gccctgaag atttatgagg
540
taatgttcac ttcactctgt gcttcttttc ctagatgtga actatgaaga ctttactttc
600
accataccag atgtagagga ctcaagtcag agaccagatc agggacccca gagacctcct
660
cctgaaggac tcctacctag acccctgggt gatagtggta accaagatga tggctcctag
720
cagagaccac caaaaccagg aggccatcac cgccatcttc cccacctcc ttttcaaaat
780
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840
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caaccactct ggtaacttag aattcagtg gaaaaataa ataagaagat aacttccttc
960
agaaaagcat gacattgaaa taatgtggtc ataactcttt cttcagtata ccaataaaaat
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attaatagca tgcggaagaa agaatgggtt gcattccacat ggagagtgtg ccatttagag
1080

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gtaacaggga gaggagaggg tgtgccatca agaggcaaca tggaggtgtt tcaaacctat
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 gcatcttgtt ataaatatat ctttgctcac atgaatttta cttgttaatt agcctggctg
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 ggggtgaatgg taacaggaga gaaatggaag agaataggga gcactgcgcc agcattaaca
 1260
 gctcactgtc t
 1271

<210> 2792
 <211> 123
 <212> PRT
 <213> Homo sapiens

<400> 2792
 Cys Ser Leu His Pro Val Leu Leu Phe Leu Asp Val Asn Tyr Glu Asp
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 Phe Thr Phe Thr Ile Pro Asp Val Glu Asp Ser Ser Gln Arg Pro Asp
 20 25 30
 Gln Gly Pro Gln Arg Pro Pro Pro Glu Gly Leu Leu Pro Arg Pro Pro
 35 40 45
 Gly Asp Ser Gly Asn Gln Asp Asp Gly Pro Gln Gln Arg Pro Pro Lys
 50 55 60
 Pro Gly Gly His His Arg His Pro Pro Pro Pro Phe Gln Asn Gln
 65 70 75 80
 Gln Arg Pro Pro Gln Arg Gly His Arg Gln Leu Ser Leu Pro Arg Phe
 85 90 95
 Pro Ser Val Ser Leu Gln Glu Ala Ser Ser Phe Phe Arg Arg Asp Arg
 100 105 110
 Pro Ala Arg His Pro Gln Glu Gln Pro Leu Trp
 115 120

<210> 2793
 <211> 847
 <212> DNA
 <213> Homo sapiens

<400> 2793
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 120
 tgaggcggcg gcgtcactgc caggaaacaa cccaacagt cagcgcgccg gcggccgcgg
 180
 cggccctgag agctgactct gcagctgagg tagagagaca acgatcagga accctaagaa
 240
 gaggcgccag aggagccgcc ttctgcctca gaacggcgtg actcggagaa ttggagcgtt
 300
 attcagtata ttaatgtctt attgataatg gcagaacatc caccactact ggatacaact
 360
 cagatcttaa ttagtgatat ttctcttttg tctgccctta ttgtaagtgc agatggaaca
 420
 caacaggtta ttctggtaca agttaaccca ggagaagcat ttacaataag aagagaagat
 480

ggacagtttc agtgcattac aggtcctgct caggttccaa tgatgtcccc aaatggttct
 540
 gtgcctccta tctatgtgcc tctctggatat gcccacacagg ttattgaaga caatggtggt
 600
 cgaagagttg tcgtgggtccc tcaggcacca gagtttcacc ctggttagtca cacagttctc
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 caccgttttc cacatcctcc tctacctggt ttcattcctg tcccaactat gatgccgcct
 720
 caccacgtca tatgtactca cccgtgactg gagctggaga catgacaaca cagtatatgc
 780
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 840
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 847

<210> 2794

<211> 139

<212> PRT

<213> Homo sapiens

<400> 2794

Met	Ala	Glu	His	Pro	Pro	Leu	Leu	Asp	Thr	Thr	Gln	Ile	Leu	Ser	Ser
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Asp	Ile	Ser	Leu	Leu	Ser	Ala	Pro	Ile	Val	Ser	Ala	Asp	Gly	Thr	Gln
			20					25					30		
Gln	Val	Ile	Leu	Val	Gln	Val	Asn	Pro	Gly	Glu	Ala	Phe	Thr	Ile	Arg
		35				40						45			
Arg	Glu	Asp	Gly	Gln	Phe	Gln	Cys	Ile	Thr	Gly	Pro	Ala	Gln	Val	Pro
	50					55				60					
Met	Met	Ser	Pro	Asn	Gly	Ser	Val	Pro	Pro	Ile	Tyr	Val	Pro	Pro	Gly
65				70					75				80		
Tyr	Ala	Pro	Gln	Val	Ile	Glu	Asp	Asn	Gly	Val	Arg	Arg	Val	Val	Val
			85					90					95		
Val	Pro	Gln	Ala	Pro	Glu	Phe	His	Pro	Gly	Ser	His	Thr	Val	Leu	His
		100						105					110		
Arg	Ser	Pro	His	Pro	Pro	Leu	Pro	Gly	Phe	Ile	Pro	Val	Pro	Thr	Met
		115				120						125			
Met	Pro	Pro	His	His	Val	Ile	Cys	Thr	His	Pro					
	130					135									

<210> 2795

<211> 1022

<212> DNA

<213> Homo sapiens

<400> 2795

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 120
 gcctggcagc tgctggttgt ggaatagttc tggatgccaa tctctccag gctcctgcgg
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 240

gtcatgagaa ggtgctgctc cttctcgctg ggcttgctca gagagatgtg ccaggcccca
 300
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 360
 cgggtgctgcc ggaacacctc acagtctatg ttctctgtca tgttcagaat gatgtagttt
 420
 ttcccagcca gattgctcca gtccttgtag atcacctgag tagaatccca gggatcctg
 480
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 540
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 600
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 aatgaaggca aggccggcac ctctcgtgc tggccagaca aaccagctgc tctcgagtg
 720
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 780
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 900
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 1020
 gt
 1022

<210> 2796
 <211> 56
 <212> PRT
 <213> Homo sapiens

<400> 2796
 Ala Ser Ala Ala Cys Pro Ser Arg Ser Cys Trp Leu Arg Ser Ser Cys
 1 5 10 15
 Pro Lys Val Ala Glu Glu Gly Val Ser Ser Met Ser Pro Gly Ala Ser
 20 25 30
 Gly Glu Glu Ala Glu Val Leu Glu Pro Arg Gly Ser Ser Ser Gly Cys
 35 40 45
 Ser Ala Pro Leu Gly Ala Val Val
 50 55

<210> 2797
 <211> 475
 <212> DNA
 <213> Homo sapiens

<400> 2797
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 120

ctgaactcca tcagcgagtc cccgcatgag cgcattgcacc cctacatcga gctggcctgg
 180
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 240
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 300
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 360
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 475

<210> 2798

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2798

Arg Pro Leu Leu Ile Ala Phe Ser Ala Cys Thr Thr Val Leu Val Ala
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 20 25 30
 Glu Ala Val Ser Asn Ile His Asn Leu Asn Ser Ile Ser Glu Ser Pro
 35 40 45
 His Glu Arg Met His Pro Tyr Ile Glu Leu Ala Trp Gly Phe Ser Thr
 50 55 60
 Val Leu Gly Ile Leu Leu Phe Leu Ala Glu Val Val Leu Leu Cys Trp
 65 70 75 80
 Ile Lys Phe Leu Pro Val Asp Ala Arg Arg Gln Pro Gly Pro Pro Pro
 85 90 95
 Gly Pro Gly Ser His Thr Gly Trp Gln Ala Ala Leu Val Ser Thr Ile
 100 105 110
 Ile Met Val Pro Val Gly Leu Ile Phe Val Val Phe Thr Ile His Phe
 115 120 125
 Tyr Arg Ser Leu Val Arg His Lys Thr Glu Arg His Asn Arg Glu Ile
 130 135 140
 Glu Glu Leu His Lys Leu Lys Val Gln Leu Asp Gly His Glu
 145 150 155

<210> 2799

<211> 2872

<212> DNA

<213> Homo sapiens

<400> 2799

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 120
 gggcagccct tgagcttgac tctctgtggg ccagtctcta tcagaaaatg cctgaccagc
 180
 tcatgggtca tgttctcttt tttattctgc tgcattgatgg ttggagggtg cgaagacacc
 240

ttcattggccca gcccgtagca gcttgagatc tccagggagc aggccatcgc gctcctcaag
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360
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420
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480
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720
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780
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900
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 2700
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 2760
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<210> 2800

<211> 294

<212> PRT

<213> Homo sapiens

<400> 2800

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Thr	Phe	Met	Ala	Ser	Pro	Tyr	Lys	Pro	Glu	Ile	Ser	Arg	Glu	Gln	Ala
			20						25				30		
Ile	Ala	Leu	Leu	Lys	Asp	Gln	Glu	Pro	Gly	Ala	Phe	Ile	Ile	Arg	Asp
			35				40					45			
Ser	His	Ser	Phe	Arg	Gly	Ala	Tyr	Gly	Leu	Ala	Met	Lys	Val	Ser	Ser
			50			55				60					
Pro	Pro	Pro	Thr	Ile	Met	Gln	Gln	Asn	Lys	Lys	Gly	Asp	Met	Thr	His
65				70					75					80	
Glu	Leu	Val	Arg	His	Phe	Leu	Ile	Glu	Thr	Gly	Pro	Arg	Gly	Val	Lys
				85					90					95	
Leu	Lys	Gly	Cys	Pro	Asn	Glu	Pro	Asn	Phe	Gly	Ser	Leu	Ser	Ala	Leu

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          100              105              110
Val Tyr Gln His Ser Ile Ile Pro Leu Ala Leu Pro Cys Lys Leu Val
          115              120              125
Ile Pro Asn Arg Asp Pro Thr Asp Glu Ser Lys Asp Ser Ser Gly Pro
          130              135              140
Ala Asn Ser Thr Ala Asp Leu Leu Lys Gln Gly Ala Ala Cys Asn Val
          145              150              155              160
Leu Phe Ile Asn Ser Val Asp Met Glu Ser Leu Thr Gly Pro Gln Ala
          165              170              175
Ile Ser Lys Ala Thr Ser Glu Thr Leu Ala Ala Asp Pro Thr Pro Ala
          180              185              190
Ala Thr Ile Val His Phe Lys Val Ser Ala Gln Gly Ile Thr Leu Thr
          195              200              205
Asp Asn Gln Arg Lys Leu Phe Phe Arg Arg His Tyr Pro Leu Asn Thr
          210              215              220
Val Thr Phe Cys Asp Leu Asp Pro Gln Glu Arg Lys Trp Met Lys Thr
          225              230              235              240
Glu Gly Gly Ala Pro Ala Lys Leu Phe Gly Phe Val Ala Arg Lys Gln
          245              250              255
Gly Ser Thr Thr Asp Asn Ala Cys His Leu Phe Ala Glu Leu Asp Pro
          260              265              270
Asn Gln Pro Ala Ser Ala Ile Val Asn Phe Val Ser Lys Val Met Leu
          275              280              285
Asn Ala Gly Gln Lys Arg
          290

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<210> 2801

<211> 549

<212> DNA

<213> Homo sapiens

<400> 2801

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120
ttcagcacac cagtggggca gtgcctcgaa aaggcaacag atggctccct gcaaagtga
180
gattggacgt tgaatatgga gatctgtgac atcatcaatg agacggagga agggccaaa
240
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300
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360
gtggccaacc gagatttcat cgacagtgtt ctggtcaaaa ttatatctcc caagaacaac
420
ctctcccacca ttgtacagga caaagtgcct gctctgatcc aggcattggc tgatgccttt
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549

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<210> 2802

<211> 151

<212> PRT

<213> Homo sapiens

<400> 2802

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Met Glu Phe Leu Leu Gly Asn Pro Phe Ser Thr Pro Val Gly Gln Cys
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Leu Glu Lys Ala Thr Asp Gly Ser Leu Gln Ser Glu Asp Trp Thr Leu
 20             25             30
Asn Met Glu Ile Cys Asp Ile Ile Asn Glu Thr Glu Gly Pro Lys
 35             40             45
Asp Ala Ile Arg Ala Leu Lys Lys Arg Leu Asn Gly Asn Arg Asn Tyr
 50             55             60
Arg Glu Val Met Leu Ala Leu Thr Val Leu Glu Thr Cys Val Lys Asn
 65             70             75             80
Cys Gly His Arg Phe His Ile Leu Val Ala Asn Arg Asp Phe Ile Asp
 85             90             95
Ser Val Leu Val Lys Ile Ile Ser Pro Lys Asn Asn Pro Pro Thr Ile
100             105             110
Val Gln Asp Lys Val Leu Ala Leu Ile Gln Ala Trp Ala Asp Ala Phe
115             120             125
Arg Ser Ser Pro Asp Leu Thr Gly Val Val His Ile Tyr Glu Glu Leu
130             135             140
Lys Arg Lys Gly Val Glu Phe
145             150

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<210> 2803

<211> 459

<212> DNA

<213> Homo sapiens

<400> 2803

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120
ccgccagccg taggggtgtg gctgtccggg etcacgggga cctgtctcc gagtcgttcg
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tgcagcgtgt gtaccagccc ttcctcacca cctgcgacgg gcaccggggc tgcagcacct
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300
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360
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<210> 2804

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2804

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Xaa Met Ala Thr Pro Gly Leu Gln Gln His Gln Gln Pro Pro Gly Pro
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Gly Arg His Arg Trp Pro Pro Pro Gly Gly Ala Ala Pro Ala Pro
 20           25           30
Val Arg Gly Met Thr Asp Ser Pro Pro Ala Val Gly Cys Val Leu
 35           40           45
Ser Gly Leu Thr Gly Thr Leu Ser Pro Ser Arg Ser Cys Ser Val Cys
 50           55           60
Thr Ser Pro Ser Ser Pro Pro Ala Thr Gly Thr Gly Pro Ala Ala Pro
 65           70           75           80
Thr Ala Ile Cys Gln Pro Pro Cys Arg Asn Gly Gly Ser Cys Val Gln
 85           90           95
Pro Gly Arg Cys Arg Cys Pro Ala Gly Trp Arg Gly Asp Thr Cys Gln
 100          105          110
Ser Asp Val Asp Xaa Cys Asn Glu Gly Arg Ser Ala Glu Ala Ala Val
 115          120          125
Gln Gly Gly Pro Ala Gly Gly Glu Ala Ala Ala Gly Thr Gly Pro Thr
 130          135          140
Ala Gln Pro Gly Leu Ala Gly Thr Gly
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<210> 2805

<211> 771

<212> DNA

<213> Homo sapiens

<400> 2805

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gatctctgga atagctacca ggcaaagaaa aaaactatgg atgccaaaga tggccagaca
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atgaatgaga agcaactctt ccatggggaca gatgccggct cagtgcacac cgtcaatcga
 240
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 420
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 480
gataatgtgc accatccaag ttattttgtg gcattttatg actaccaagc ataccagag
 540
taccttatta cgtttagaaa ataactctt ggtatccttc ccacaaaatt attctccatt
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tgtacatate tagttgtaaa acaagtttta gctttttttt ttaattcctc ttaacagatt
 660
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 771

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<210> 2806
 <211> 187
 <212> PRT
 <213> Homo sapiens

<400> 2806
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 20 25 30
 Lys Ile Glu Arg Ile Gln Asn Pro Asp Leu Trp Asn Ser Tyr Gln Ala
 35 40 45
 Lys Lys Lys Thr Met Asp Ala Lys Asn Gly Gln Thr Met Asn Glu Lys
 50 55 60
 Gln Leu Phe His Gly Thr Asp Ala Gly Ser Val Pro His Val Asn Arg
 65 70 75 80
 Asn Gly Phe Asn Arg Ser Tyr Ala Gly Lys Asn Ala Val Ala Tyr Gly
 85 90 95
 Lys Gly Thr Tyr Phe Ala Val Asn Ala Asn Tyr Ser Ala Asn Asp Thr
 100 105 110
 Tyr Ser Arg Pro Asp Ala Asn Gly Arg Lys His Val Tyr Tyr Val Arg
 115 120 125
 Val Leu Thr Gly Ile Tyr Thr His Gly Asn His Ser Leu Ile Val Pro
 130 135 140
 Pro Ser Lys Asn Pro Gln Asn Pro Thr Asp Leu Tyr Asp Thr Val Thr
 145 150 155 160
 Asp Asn Val His His Pro Ser Leu Phe Val Ala Phe Tyr Asp Tyr Gln
 165 170 175
 Ala Tyr Pro Glu Tyr Leu Ile Thr Phe Arg Lys
 180 185

<210> 2807
 <211> 1660
 <212> DNA
 <213> Homo sapiens

<400> 2807
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 120
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 180
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 240
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 300
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 360
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 420
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 480

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 540
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 600
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 660
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 720
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 780
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 840
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 900
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 960
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 1020
 aacgctgatg gtggtctcag ggggaaaact caggacctgc acataagtgg atgaccggaa
 1080
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 1200
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 1660

<210> 2808

<211> 390

<212> PRT

<213> Homo sapiens

<400> 2808

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Glu	Leu	Ala	Gly	Cys	Ala	Ser	Cys	Leu	Thr	Val	Gln	Asp	Asn	Trp	Thr
			20					25					30		
Leu	Glu	Leu	Glu	Ser	Ser	Gln	Asp	Ile	Gln	Asp	Val	Leu	Asp	Ala	Asn
			35				40				45				
Lys	Ser	Leu	Pro	Glu	Ser	Ser	Leu	Thr	Asp	Leu	Leu	Ser	Asp	Asn	Phe

50	55	60
Thr Asp Ser Leu Val Ser	Phe Ser Ala Glu Ile	Leu Ser Arg Thr Leu
65	70	75
Cys Glu Pro Leu Val Ala	Ser Leu Trp Met Lys	Leu Gly Asn Thr Gly
85	90	95
Ala Met Arg Arg Cys Val	Lys Leu Thr Val Ala	Leu Glu Thr Ala Glu
100	105	110
Cys Glu Phe Pro Pro His	Leu Asp Val Tyr Ile	Glu Asp Pro His Leu
115	120	125
Pro Pro Ser Leu Gly Leu	Pro Gly Ala Arg Val His	Phe Ser Gln
130	135	140
Leu Glu Lys Arg Val Ser	Arg Ser His Asn Val	Tyr Cys Cys Phe Arg
145	150	155
Ser Ser Thr Tyr Val Gln	Val Leu Ser Phe Pro	Glu Thr Thr Ile
165	170	175
Ser Val Pro Leu Pro His	Ile Tyr Leu Ala Glu	Leu Leu Gln Gly Gly
180	185	190
Gln Ser Pro Phe Gln Ala	Thr Ala Ser Cys His	Ile Val Ser Val Phe
195	200	205
Ser Leu Gln Leu Phe Trp	Val Cys Ala Tyr Cys	Thr Ser Ile Cys Arg
210	215	220
Gln Gly Lys Cys Thr Arg	Leu Gly Ser Thr Cys	Pro Thr Gln Thr Ala
225	230	235
Ile Ser Gln Ala Ile Ile	Arg Leu Leu Val Glu	Asp Gly Thr Ala Glu
245	250	255
Ala Val Val Thr Cys Arg	Asn His His Val Ala	Ala Ala Leu Gly Leu
260	265	270
Cys Pro Arg Glu Trp Ala	Ser Leu Leu Asp Phe	Val Gln Val Pro Gly
275	280	285
Arg Val Val Leu Gln Phe	Ala Gly Pro Gly Ala	Gln Leu Glu Ser Ser
290	295	300
Ala Arg Val Asp Glu Pro	Met Thr Met Phe Leu	Trp Thr Leu Cys Thr
305	310	315
Ser Pro Ser Val Leu Arg	Pro Ile Val Leu Ser	Phe Glu Leu Glu Arg
325	330	335
Lys Pro Ser Lys Ile Val	Pro Leu Glu Pro Pro	Arg Leu Gln Arg Phe
340	345	350
Gln Cys Gly Glu Leu Pro	Phe Leu Thr His Val	Asn Pro Arg Leu Arg
355	360	365
Leu Ser Cys Leu Ser Ile	Arg Glu Ser Glu Tyr	Ser Ser Ser Leu Gly
370	375	380
Ile Leu Ala Ser Ser Cys		
385	390	

<210> 2809

<211> 1502

<212> DNA

<213> Homo sapiens

<400> 2809

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120

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240
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300
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1080
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1140
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1380
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1500
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1502

<210> 2810

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2810

Glu Cys Ala Cys Ala Arg Val Cys Val Cys Val Arg Leu Cys Val Arg
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 Val Cys Val Cys Ala Arg Leu Cys Val Cys Val Cys Ala Ser Val Cys
 20 25 30
 Ala Cys Val Cys Ala Cys Val Arg Leu Cys Val Arg Leu Cys Ala Cys
 35 40 45
 Val Cys Ala Ser Val Cys Met Cys Ala Arg Ala Xaa Val Cys Val Cys
 50 55 60
 Thr Cys Val Xaa Leu Cys Thr Arg Val Cys Val Cys Val His Ala Cys
 65 70 75 80
 Val Cys Val Cys Ala Arg Ala Cys Thr Ser Pro Pro Glu His Leu Gly
 85 90 95
 Phe Gly Thr Arg Trp Phe
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<210> 2811

<211> 591

<212> DNA

<213> Homo sapiens

<400> 2811

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 caaaggagac cataaagtgt aggatatttc ctggttagtg gctgcgggt aatcagcatg
 180
 catccatctt cctcggcgtc gcagccctca gtagccagaa ggcagtctcc ttccctgggg
 240
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 480
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<210> 2812

<211> 131

<212> PRT

<213> Homo sapiens

<400> 2812

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 Ser Pro Ser Leu Gly Gly Lys Ser Pro Glu Pro Ser Leu Pro Xaa Cys
 20 25 30
 Pro Ala Pro Ala Val Asp Glu Pro Gln Pro Xaa Ser Gln Ala Pro Pro

	35		40		45	
Gly	Pro	Arg	Val	Pro	Gly	Pro
50				55		60
Arg	Pro	Arg	Pro	Gly	Glu	Gly
65			70		75	80
Val	Pro	Gly	Ala	Thr	Glu	Met
			85		90	95
Pro	Pro	Gly	Pro	Thr	Gly	Arg
		100			105	110
Arg	Ala	Ala	Gly	Pro	Pro	Gly
	115			120		125
Leu	Gly	Ser				
130						

<210> 2813

<211> 2417

<212> DNA

<213> Homo sapiens

<400> 2813

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180
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1020

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<210> 2814

<211> 471

<212> PRT

<213> Homo sapiens

<400> 2814

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      20              25              30
Trp Lys Glu Leu Ser Leu Lys Tyr Lys Gln Ser Phe Gln Glu Ala Arg
      35              40              45
Asp Glu Leu Val Glu Phe Gln Glu Gly Ser Arg Glu Leu Glu Ala Glu
 50              55              60
Leu Glu Ala Gln Leu Val Gln Ala Glu Gln Arg Asn Arg Asp Leu Gln
65              70              75              80
Ala Asp Asn Gln Arg Leu Lys Tyr Glu Val Glu Ala Leu Lys Glu Lys
      85              90              95
Leu Glu His Gln Tyr Ala Gln Ser Tyr Lys Gln Val Ser Val Leu Glu
      100              105              110
Asp Asp Leu Ser Gln Thr Arg Ala Ile Lys Glu Gln Leu His Lys Tyr
      115              120              125
Val Arg Glu Leu Glu Gln Ala Asn Asp Asp Leu Glu Arg Ala Lys Arg
      130              135              140
Ala Thr Ile Val Ser Leu Glu Thr Leu Asn Lys Leu Asn Gln Ala Ile
145              150              155              160
Glu Arg Asn Ala Phe Leu Glu Ser Glu Leu Asp Glu Lys Glu Ser Leu
      165              170              175
Leu Val Ser Val Gln Arg Leu Lys Asp Glu Ala Arg Asp Leu Arg Gln
      180              185              190
Glu Leu Ala Val Arg Glu Arg Gln Gln Glu Val Thr Arg Lys Ser Ala
      195              200              205
Pro Ser Ser Pro Thr Leu Asp Cys Glu Lys Met Asp Ser Ala Val Gln
      210              215              220
Ala Ser Leu Ser Leu Pro Ala Thr Pro Val Gly Lys Gly Thr Glu Asn
225              230              235              240
Thr Phe Pro Ser Pro Lys Ala Ile Pro Asn Gly Phe Gly Thr Ser Pro
      245              250              255
Leu Thr Pro Ser Ala Arg Ile Ser Ala Leu Asn Ile Val Gly Asp Leu
      260              265              270
Leu Arg Lys Val Gly Ala Leu Glu Ser Lys Leu Ala Ala Cys Arg Asn
      275              280              285
Phe Ala Lys Asp Gln Ala Ser Arg Lys Ser Tyr Ile Ser Gly Asn Val
      290              295              300
Asn Cys Gly Val Leu Asn Gly Asn Gly Thr Lys Phe Ser Arg Ser Gly
305              310              315              320
His Thr Ser Phe Phe Asp Lys Gly Ala Val Asn Gly Phe Asp Pro Ala
      325              330              335
Pro Pro Pro Pro Gly Leu Gly Ser Ser Arg Pro Ser Ser Ala Pro Gly
      340              345              350
Met Cys Leu Ser Val Cys Glu Cys Leu Ala Ser Arg Gly Ala Pro Ala
      355              360              365
Leu Leu Gln Gln Pro Arg Thr Pro Thr Pro His Pro Ser Val Pro Gly
      370              375              380
Pro Ser Pro Val Pro Leu Arg Leu Pro Pro His Gly Trp Gln Arg Ala
385              390              395              400
Gly Cys Met Gln Trp Arg Leu Leu Gly Pro Ala Gln Pro Arg Asn Ser
      405              410              415
Ala Arg Tyr Gln Tyr Trp Leu Phe Ser Leu Leu Ala Val Val Pro Leu

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	420		425		430
Val Ser His Asp Cys Thr Phe Val Gly Arg Lys Val Ile His Thr Cys					
435		440		445	
Ile Thr Trp Ser Leu Asp Ala Glu Val Pro Ile His His Thr Cys Pro					
450		455		460	
Ile Ala Pro Thr Leu Leu Tyr					
465		470			

<210> 2815
 <211> 1421
 <212> DNA
 <213> Homo sapiens

<400> 2815
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 180
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 1020
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 1080
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 1140
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 1200

gctgggatct tctctgtgaa tccacccctg gctaccccca ccttggtac cccaacggca
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 1320
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 1421

<210> 2816

<211> 307

<212> PRT

<213> Homo sapiens

<400> 2816

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Val	Gly	Gly	Thr	Glu	His	Ala	Tyr	Arg	Pro	Gly	Arg	Arg	Val	Cys	Ala
			20					25					30		
Val	Arg	Ala	His	Gly	Asp	Pro	Val	Ser	Glu	Ser	Phe	Val	Gln	Arg	Val
		35					40					45			
Tyr	Gln	Pro	Phe	Leu	Thr	Thr	Cys	Asp	Gly	His	Arg	Ala	Cys	Ser	Thr
	50					55					60				
Tyr	Arg	Thr	Ile	Tyr	Arg	Thr	Ala	Tyr	Arg	Arg	Ser	Pro	Gly	Leu	Ala
	65				70				75					80	
Pro	Ala	Arg	Pro	Arg	Tyr	Ala	Cys	Cys	Pro	Gly	Trp	Lys	Arg	Thr	Ser
				85					90					95	
Gly	Leu	Pro	Gly	Ala	Cys	Gly	Ala	Ala	Ile	Cys	Gln	Pro	Pro	Cys	Arg
		100						105					110		
Asn	Gly	Gly	Ser	Cys	Val	Gln	Pro	Gly	Arg	Cys	Arg	Cys	Pro	Ala	Gly
		115					120					125			
Trp	Arg	Gly	Asp	Thr	Cys	Gln	Ser	Asp	Val	Asp	Glu	Cys	Ser	Ala	Arg
	130					135					140				
Arg	Gly	Gly	Cys	Pro	Gln	Arg	Cys	Val	Asn	Thr	Ala	Gly	Ser	Tyr	Trp
	145				150					155					160
Cys	Gln	Cys	Trp	Glu	Gly	His	Ser	Leu	Ser	Ala	Asp	Gly	Thr	Leu	Cys
			165						170					175	
Val	Pro	Lys	Gly	Gly	Pro	Pro	Arg	Val	Ala	Pro	Asn	Pro	Thr	Gly	Val
		180						185					190		
Asp	Ser	Ala	Met	Lys	Glu	Glu	Val	Gln	Arg	Leu	Gln	Ser	Arg	Val	Asp
		195					200					205			
Leu	Leu	Glu	Glu	Lys	Leu	Gln	Leu	Val	Leu	Ala	Pro	Leu	His	Ser	Leu
	210					215					220				
Ala	Ser	Gln	Ala	Gly	Ala	Trp	Ala	Pro	Gly	Pro	Arg	Gln	Pro	Pro	Gly
	225				230					235					240
Ala	Leu	Leu	Pro	Ala	Ala	Arg	Pro	His	Arg	Leu	Pro	Glu	Arg	Ala	Asp
			245						250					255	
Phe	Leu	Pro	Gly	Gly	Ala	Ala	Gly	Val	Leu	Leu	Gln	Glu	Arg	Leu	Leu
	260						265					270			
Xaa	Asp	Cys	Pro	Ala	Pro	Gln	Ala	Gly	Leu	Ser	Pro	Ser	Arg	Arg	Pro
	275						280					285			
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Arg	Gly	Asp													

305

<210> 2817
 <211> 219
 <212> DNA
 <213> Homo sapiens

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 120
 gttctgctgc gggcggagtt ccatcagcac cagcacacac accagcacac gcaccaacac
 180
 acacaccagc accaacacac attcgccccc ttcacgcgt
 219

<210> 2818
 <211> 73
 <212> PRT
 <213> Homo sapiens

<400> 2818
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 Leu Arg Gln Glu Leu Asn Thr Arg Phe Leu Val Gln Ser Ala Glu Arg
 20 25 30
 Pro Gly Ala Ser Leu Gly Pro Gly Val Leu Leu Arg Ala Glu Phe His
 35 40 45
 Gln His Gln His Thr His Gln His Thr His Gln His Thr His Gln His
 50 55 60
 Gln His Thr Phe Ala Pro Phe Thr Arg
 65 70

<210> 2819
 <211> 730
 <212> DNA
 <213> Homo sapiens

<400> 2819
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 120
 ggacccaaag gcgagaaggg ctccatgggg gccctgggg agcgggtgcaa gagccactac
 180
 gccgcctttt cgggtgggccc ggaagcccat gcacagcaac cactactacc agacgtgatc
 240
 ttcgacacgg agttcgtgaa cctctacgac cacttcaaca tggtcaccgg caagtctac
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 360
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 420

gaccgcagca tcattgcaaag ccagagcctg atgctggagc tgcgagagca ggaccaggtg
 480
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 540
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 600
 ctcccttctc ctgccacct tccaccctg cgctgtgctg accccaccgc ctcttccccg
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 gccaaagcga
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<210> 2820

<211> 195

<212> PRT

<213> Homo sapiens

<400> 2820

Xaa	Thr	Ala	Val	Pro	Gln	Ile	Asn	Ile	Thr	Ile	Leu	Lys	Gly	Glu	Lys
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Gly	Asp	Arg	Gly	Asp	Arg	Gly	Leu	Gln	Gly	Lys	Tyr	Gly	Lys	Thr	Gly
		20						25					30		
Ser	Ala	Gly	Ala	Arg	Gly	His	Thr	Gly	Pro	Lys	Gly	Gln	Lys	Gly	Ser
		35				40						45			
Met	Gly	Ala	Pro	Gly	Glu	Arg	Cys	Lys	Ser	His	Tyr	Ala	Ala	Phe	Ser
		50				55					60				
Val	Gly	Arg	Glu	Ala	His	Ala	Gln	Gln	Pro	Leu	Leu	Pro	Asp	Val	Ile
		65			70					75				80	
Phe	Asp	Thr	Glu	Phe	Val	Asn	Leu	Tyr	Asp	His	Phe	Asn	Met	Phe	Thr
			85					90					95		
Gly	Lys	Phe	Tyr	Cys	Tyr	Val	Pro	Gly	Leu	Tyr	Phe	Phe	Ser	Leu	Asn
		100						105					110		
Val	His	Thr	Trp	Asn	Gln	Lys	Glu	Thr	Tyr	Leu	His	Ile	Met	Lys	Asn
		115				120						125			
Glu	Glu	Glu	Val	Val	Ile	Leu	Phe	Ala	Gln	Val	Gly	Asp	Arg	Ser	Ile
		130				135					140				
Met	Gln	Ser	Gln	Ser	Leu	Met	Leu	Glu	Leu	Arg	Glu	Gln	Asp	Gln	Val
		145			150					155				160	
Trp	Val	Arg	Leu	Tyr	Lys	Gly	Glu	Arg	Glu	Asn	Ala	Ile	Phe	Ser	Glu
			165					170					175		
Glu	Leu	Asp	Thr	Tyr	Ile	Thr	Phe	Ser	Gly	Tyr	Leu	Val	Lys	His	Ala
			180					185					190		
Thr	Glu	Pro													
			195												

<210> 2821

<211> 1746

<212> DNA

<213> Homo sapiens

<400> 2821

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120
tggttactcc tcgccatggc acaactccaa acacgtttct acactgataa caagaaatat
180
gcagtagatg atgttccttt ctcaatccct gccacctcag aagttgtgta ccttagtaat
240
attatcaata aattgtctga gacccaaaaa gagctccaca aacatgtgga gtttgatttc
300
ctcatcaagg gccagtttct tcgaatgccc ttggacaaac acatggaaat ggaagacatc
360
tcacagaag aagttgtgga aatagaatac gtggagaagt atactgcacc ccagccagag
420
caatgcattg tccatgatga ctggatcagt tcaattaaag gggcagagga atggatcttg
480
actggttctt atggaagac ttctcggatc tggtccttgg aaggaaagtc aataatgaca
540
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660
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720
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780
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960
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1020
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1140
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1320
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1380
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1440
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1500
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1560
tattttgtat ttataataag atagggtgtg ttataaaaaa acaactgtg gcatacatcc
1620
ctatacaaaa ctgaaatta aactgagttt tacatttctc tttaaaggta ttgggttgaa
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 1740
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 1746

<210> 2822
 <211> 424
 <212> PRT
 <213> Homo sapiens

<400> 2822
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 20 25 30
 Leu Ser Asn Ile Ile Asn Lys Leu Leu Glu Thr Lys Asn Glu Leu His
 35 40 45
 Lys His Val Glu Phe Asp Phe Leu Ile Lys Gly Gln Phe Leu Arg Met
 50 55 60
 Pro Leu Asp Lys His Met Glu Met Glu Asp Ile Ser Ser Glu Glu Val
 65 70 75 80
 Val Glu Ile Glu Tyr Val Glu Lys Tyr Thr Ala Pro Gln Pro Glu Gln
 85 90 95
 Cys Met Phe His Asp Asp Trp Ile Ser Ser Ile Lys Gly Ala Glu Glu
 100 105 110
 Trp Ile Leu Thr Gly Ser Tyr Gly Lys Thr Ser Arg Ile Trp Ser Leu
 115 120 125
 Glu Gly Lys Ser Ile Met Thr Ile Val Gly His Thr Asp Val Val Lys
 130 135 140
 Asp Val Ala Trp Val Lys Lys Asp Ser Leu Ser Cys Leu Leu Xaa Glu
 145 150 155 160
 Cys Phe Tyr Gly Ser Asp Tyr Ser Leu Met Gly Val Glu Cys Arg Glu
 165 170 175
 Lys Gln Ser Glu Ser Pro Thr Leu Leu Xaa Arg Gly His Ala Gly Ser
 180 185 190
 Val Asp Ser Ile Ala Val Asp Gly Ser Gly Thr Lys Phe Cys Ser Gly
 195 200 205
 Ser Trp Asp Lys Met Leu Lys Ile Trp Ser Thr Val Pro Thr Asp Glu
 210 215 220
 Glu Asp Glu Met Glu Glu Ser Thr Asn Arg Pro Arg Lys Lys Gln Lys
 225 230 235 240
 Thr Glu Gln Leu Gly Leu Thr Arg Thr Pro Ile Val Thr Leu Ser Gly
 245 250 255
 His Met Glu Ala Val Ser Ser Val Leu Trp Ser Asp Ala Glu Glu Ile
 260 265 270
 Cys Ser Ala Ser Trp Asp His Thr Ile Arg Val Trp Asp Val Glu Ser
 275 280 285
 Gly Ser Leu Lys Ser Thr Leu Thr Gly Asn Lys Val Phe Asn Cys Ile
 290 295 300
 Ser Tyr Ser Pro Leu Cys Lys Arg Leu Ala Ser Gly Ser Thr Asp Arg
 305 310 315 320
 His Ile Arg Leu Trp Asp Pro Arg Thr Lys Asp Gly Ser Leu Val Ser
 325 330 335
 Leu Ser Leu Thr Ser His Thr Gly Trp Val Thr Ser Val Lys Trp Ser


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          340          345          350
Pro Thr His Glu Gln Gln Leu Ile Ser Gly Ser Leu Asp Asn Ile Val
          355          360          365
Lys Leu Trp Asp Thr Arg Ser Cys Lys Ala Pro Leu Tyr Asp Leu Ala
          370          375          380
Ala His Glu Asp Lys Val Leu Ser Val Asp Trp Thr Asp Thr Gly Leu
          385          390          395          400
Leu Leu Ser Gly Gly Ala Asp Asn Lys Leu Tyr Ser Tyr Arg Tyr Ser
          405          410          415
Pro Thr Thr Ser His Val Gly Ala
          420

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<210> 2823

<211> 461

<212> DNA

<213> Homo sapiens

<400> 2823

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120
ggtgggtggt gaccctgtt gggaggcaga cacagtcaaa ggcgtcgccc ttgggaaggg
180
cagccggaga agctggccct gtgtgggcct gggcctgtag ggtttcccg tggttttgcg
240
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300
atggggagac gcacatgtcc ctggccacg acaaaatggc agtgatgctg cttgccttcc
360
tgcagcatct gtgaggatca aatgcgtgca cctacgcaaa gcatccgcac atagcaagtg
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461

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<210> 2824

<211> 81

<212> PRT

<213> Homo sapiens

<400> 2824

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Met Cys Val Ser Pro Ser Ser Pro Cys Pro Arg Gly Phe Ala Trp Leu
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Asp Gln Val Pro Ser Ser Ser Leu Ala Pro Gln Ser His Trp Glu Thr
          20          25          30
Leu Gln Ala Gln Ala His Thr Gly Pro Ala Ser Pro Ala Ala Leu Pro
          35          40          45
Lys Gly Asp Ala Cys Asp Cys Val Cys Leu Pro Thr Gly Val Thr Thr
          50          55          60
His Pro Arg Pro Pro Glu Pro Gln His Glu Gly Ser Ala Pro Phe Pro
65          70          75          80
His

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<210> 2825
 <211> 1520
 <212> DNA
 <213> Homo sapiens

<400> 2825
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 120
 gatggacatg tagagggtggc acgtttgctt ttggatagtg gtgctcaagt gaacatgcct
 180
 gcagattcat ttgaatctcc attgacgcta gctgctgtg gaggacatgt tgaattggca
 240
 gctctactta ttgaaagggg agcaaatctt gaagaagtta atgatgaagg atacactccc
 300
 ttgatggaag cagctcgaga aggacatgaa gaaatgggtg cattacttct tagcacaagg
 360
 agcnaaatat caatgcacag acagaagaaa ctcaagaaac tgctcttgac tctggcttgc
 420
 tgtggaggct ttctggaagt ggcagacttt ctaattaagg caggagccga tatagaacta
 480
 ggggtgttcta cccctttaat ggaagctgct caagagggtc atttggagtt agttaaatac
 540
 ttattagctg caggagctaa cgttcatgca acaacagcaa caggggatac agcactaaca
 600
 tatgcctgtg aaaatggtca tactgatgta gcagatgtct tacttcaggc agggcgagat
 660
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 720
 gaacatgaat ctgaaggtgg aagaactcct ttaatgaaa gctgcaagagc tggatcatgtt
 780
 tgtactgttc agttcttaat tagtaaagga gcgaatgtga atagaaccac agctaataat
 840
 gaccatactg tactgtccct ggcttgtgca gggggtcac tgccagtggt ggaactactt
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 1020
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 1080
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 1320
 gaagccatag aaaagaatgc acagctgcag tccttggaa cggctcatgc tgaccaactt
 1380
 accaaggaga agatcgagga gctcaacaaa acaagggagg aacaaattca gaagaacaa
 1440

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<210> 2826

<211> 506

<212> PRT

<213> Homo sapiens

<400> 2826

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Leu	Leu	Glu	Ala	Gly	Ala	Asp	Gln	Glu	His	Lys	Thr	Asp	Glu	Met	His
		20					25						30		
Thr	Ala	Leu	Met	Glu	Ala	Cys	Met	Asp	Gly	His	Val	Glu	Val	Ala	Arg
		35					40					45			
Leu	Leu	Leu	Asp	Ser	Gly	Ala	Gln	Val	Asn	Met	Pro	Ala	Asp	Ser	Phe
	50				55					60					
Glu	Ser	Pro	Leu	Thr	Leu	Ala	Ala	Cys	Gly	Gly	His	Val	Glu	Leu	Ala
65				70						75				80	
Ala	Leu	Leu	Ile	Glu	Arg	Gly	Ala	Asn	Leu	Glu	Glu	Val	Asn	Asp	Glu
				85				90					95		
Gly	Tyr	Thr	Pro	Leu	Met	Glu	Ala	Ala	Arg	Glu	Gly	His	Glu	Glu	Met
		100					105						110		
Val	Ala	Leu	Leu	Leu	Ser	Thr	Arg	Ser	Xaa	Ile	Ser	Met	His	Arg	Gln
		115				120						125			
Lys	Lys	Leu	Lys	Lys	Leu	Leu	Leu	Thr	Leu	Ala	Cys	Cys	Gly	Gly	Phe
	130				135						140				
Leu	Glu	Val	Ala	Asp	Phe	Leu	Ile	Lys	Ala	Gly	Ala	Asp	Ile	Glu	Leu
145				150					155					160	
Gly	Cys	Ser	Thr	Pro	Leu	Met	Glu	Ala	Ala	Gln	Glu	Gly	His	Leu	Glu
			165					170						175	
Leu	Val	Lys	Tyr	Leu	Leu	Ala	Ala	Gly	Ala	Asn	Val	His	Ala	Thr	Thr
		180						185					190		
Ala	Thr	Gly	Asp	Thr	Ala	Leu	Thr	Tyr	Ala	Cys	Glu	Asn	Gly	His	Thr
		195				200						205			
Asp	Val	Ala	Asp	Val	Leu	Leu	Gln	Ala	Gly	Ala	Asp	Leu	Asp	Lys	Gln
	210				215					220					
Glu	Asp	Met	Lys	Thr	Ile	Leu	Glu	Gly	Ile	Asp	Pro	Ala	Lys	His	Leu
225				230					235					240	
Glu	His	Glu	Ser	Glu	Gly	Gly	Arg	Thr	Pro	Leu	Met	Lys	Ala	Ala	Arg
			245					250						255	
Ala	Gly	His	Val	Cys	Thr	Val	Gln	Phe	Leu	Ile	Ser	Lys	Gly	Ala	Asn
		260					265						270		
Val	Asn	Arg	Thr	Thr	Ala	Asn	Asn	Asp	His	Thr	Val	Leu	Ser	Leu	Ala
		275				280						285			
Cys	Ala	Gly	Gly	His	Leu	Ala	Val	Val	Glu	Leu	Leu	Leu	Ala	His	Gly
	290				295					300					
Ala	Asp	Pro	Thr	His	Arg	Leu	Lys	Asp	Gly	Ser	Thr	Met	Leu	Ile	Glu
305				310					315					320	
Ala	Ala	Lys	Gly	Gly	His	Thr	Ser	Val	Val	Cys	Tyr	Leu	Leu	Asp	Tyr
			325					330					335		
Pro	Asn	Asn	Leu	Leu	Ser	Ala	Pro	Pro	Pro	Asp	Val	Thr	Gln	Leu	Thr

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          340              345              350
Pro Pro Ser His Asp Leu Asn Arg Ala Pro Arg Val Pro Val Gln Ala
  355              360              365
Leu Pro Met Val Val Pro Pro Gln Glu Pro Asp Lys Pro Pro Ala Asn
  370              375              380
Val Ala Thr Thr Leu Pro Ile Arg Asn Lys Ala Ala Ser Lys Gln Lys
  385              390              395              400
Ser Ser Ser His Leu Pro Ala Asn Ser Gln Asp Val Gln Gly Tyr Ile
          405              410              415
Thr Asn Gln Ser Pro Glu Ser Ile Val Glu Glu Ala Gln Gly Lys Leu
          420              425              430
Thr Glu Leu Glu Gln Arg Ile Lys Glu Ala Ile Glu Lys Asn Ala Gln
          435              440              445
Leu Gln Ser Leu Glu Leu Ala His Ala Asp Gln Leu Thr Lys Glu Lys
          450              455              460
Ile Glu Glu Leu Asn Lys Thr Arg Glu Glu Gln Ile Gln Lys Lys Gln
  465              470              475              480
Lys Ile Leu Glu Glu Leu Gln Lys Val Glu Arg Glu Leu Gln Leu Lys
          485              490              495
Thr Gln Gln Gln Leu Lys Lys Gln Tyr Leu
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<210> 2827

<211> 481

<212> DNA

<213> Homo sapiens

<400> 2827

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120
ctgctgcacc tgtgtgtcca gcagcctctt cagctgctgc aggtggaatt cttgcgtctg
180
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240
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300
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481

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<210> 2828

<211> 160

<212> PRT

<213> Homo sapiens

<400> 2828

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<212> DNA

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<211> 668

<212> PRT

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<400> 2830

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<213> Homo sapiens

<400> 2831

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<211> 611

<212> PRT

<213> Homo sapiens

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Val His Cys Cys Leu Tyr Phe Ile Pro Ala Thr Gly His Ser Leu Arg
      435              440              445
Pro Leu Asp Ile Glu Phe Met Lys Arg Leu Ser Lys Val Val Asn Ile
      450              455              460
Val Pro Val Ile Ala Lys Ala Asp Thr Leu Thr Leu Glu Glu Arg Val
      465              470              475              480
His Phe Lys Gln Arg Ile Thr Ala Asp Leu Leu Ser Asn Gly Ile Asp
      485              490              495
Val Tyr Pro Gln Lys Glu Phe Asp Glu Asp Ser Glu Asp Arg Leu Val
      500              505              510
Asn Glu Lys Phe Arg Glu Met Ile Pro Phe Ala Val Val Gly Ser Asp
      515              520              525
His Glu Tyr Gln Val Asn Gly Lys Arg Ile Leu Gly Arg Lys Thr Lys
      530              535              540
Trp Gly Thr Ile Glu Val Glu Asn Thr Thr His Cys Glu Phe Ala Tyr
      545              550              555              560
Leu Arg Asp Leu Leu Ile Arg Thr His Met Gln Asn Ile Lys Asp Ile
      565              570              575
Thr Ser Ser Ile His Phe Glu Ala Tyr Arg Val Lys Arg Leu Asn Glu
      580              585              590
Gly Ser Ser Ala Met Ala Asn Gly Val Glu Glu Lys Glu Pro Glu Ala
      595              600              605
Pro Glu Met
      610

<210> 2833
<211> 420
<212> DNA
<213> Homo sapiens

<400> 2833
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120
ctccggctgc tcaggtcccc aacgctccgg ggccatggag gtgcttccgg ccggaatgtg
180
actactggga gtctcgggga gccgcagtgg ctgagggtag ccaccggggg gcgcctgga
240
acatgcgcgg ccttgtttct cggacgtggg gcagccaccg gggggcgcca gggaggacgc
300
ttcgatacca aatgcctcgc ggctgccact tggggacgcc ttctgtgtcc cgaagaaaaca
360
ctcccaggac aggacagctg gaacgggggtc cccagcaggg ccggactggg catgtgcgcc
420

<210> 2834

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<211> 117
 <212> PRT
 <213> Homo sapiens

<400> 2834
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 1 5 10 15
 Leu Leu Arg Leu Leu Arg Ser Pro Thr Leu Arg Gly His Gly Gly Ala
 20 25 30
 Ser Gly Arg Asn Val Thr Thr Gly Ser Leu Gly Glu Pro Gln Trp Leu
 35 40 45
 Arg Val Ala Thr Gly Gly Arg Pro Gly Thr Ser Pro Ala Leu Phe Ser
 50 55 60
 Gly Arg Gly Ala Ala Thr Gly Gly Arg Gln Gly Gly Arg Phe Asp Thr
 65 70 75 80
 Lys Cys Leu Ala Ala Thr Trp Gly Arg Leu Pro Gly Pro Glu Glu
 85 90 95
 Thr Leu Pro Gly Gln Asp Ser Trp Asn Gly Val Pro Ser Arg Ala Gly
 100 105 110
 Leu Gly Met Cys Ala
 115

<210> 2835
 <211> 938
 <212> DNA
 <213> Homo sapiens

<400> 2835
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 120
 tgagtgggtt actgctgcgg gcaactggga ctccatcctg ctgggcatcc tctgagagtt
 180
 tatgtagaat acacttcaga attgtctctg tcaaggacaa tgaagctgag gtcctgctcc
 240
 ttattgactc agggttgctg ctctggggga cattaacccc ccaacacttc tagcttgccc
 300
 agtgactcga ctgagcacac agctgtggcc accagagaa ctctttgggc tgtgatacag
 360
 gaaaccatcg gtgtgcatgg taactctcta gcagtgtcct tcatgccggg acatggggac
 420
 acggggcaggc actgctggca tctgctaacc ccggaggccc atacttcaga accggtcagc
 480
 tgggcccaagg cctctctaag gccagcggc tctcatgggc aaatgtcagg tgacacagag
 540
 tcagagaccc tgagtgtgag aggggaagat attggtgaag acctgttctc tgaggccctg
 600
 ggccgggcag tggggcagtg ggcgggggcc aagctgctgg accatggctg tgtggagagc
 660
 agcattctgg attcctctgc gggctctgct cccactacg aggtgtttgt ggcgctgagg
 720
 gggctgagga atctgtcaga ggaaaatcga gacaagctgg accactgcct tcaggaagcc
 780

tctccccgct acaagtcctt gcggttcttg ggcagcgtgg gccctgcaga gtccacctgg
 840
 tgggtgctctg agtcaagtcc tgcctccaccg cccagctccc cccagaggcc acctgcctcc
 900
 tccctctggg acctctccgg atggggagtc ctgggcca
 938

<210> 2836

<211> 178

<212> PRT

<213> Homo sapiens

<400> 2836

Met	Pro	Gly	His	Gly	Asp	Thr	Gly	Arg	His	Cys	Trp	His	Leu	Leu	Thr
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Pro	Glu	Ala	His	Thr	Ser	Glu	Pro	Val	Ser	Trp	Ala	Lys	Ala	Ser	Leu
			20					25					30		
Arg	Pro	Ser	Gly	Ser	His	Gly	Gln	Met	Ser	Gly	Asp	Thr	Glu	Ser	Glu
			35				40					45			
Thr	Leu	Ser	Val	Arg	Gly	Glu	Asp	Ile	Gly	Glu	Asp	Leu	Phe	Ser	Glu
	50					55				60					
Ala	Leu	Gly	Arg	Ala	Val	Gly	Gln	Trp	Ala	Gly	Ala	Lys	Leu	Leu	Asp
65					70				75					80	
His	Gly	Cys	Val	Glu	Ser	Ser	Ile	Leu	Asp	Ser	Ser	Ala	Gly	Ser	Ala
			85						90					95	
Pro	His	Tyr	Glu	Val	Phe	Val	Ala	Leu	Arg	Gly	Leu	Arg	Asn	Leu	Ser
			100					105					110		
Glu	Glu	Asn	Arg	Asp	Lys	Leu	Asp	His	Cys	Leu	Gln	Glu	Ala	Ser	Pro
		115				120					125				
Arg	Tyr	Lys	Ser	Leu	Arg	Phe	Trp	Gly	Ser	Val	Gly	Pro	Ala	Glu	Ser
	130					135					140				
Thr	Trp	Trp	Cys	Pro	Glu	Ser	Ser	Pro	Ala	Pro	Pro	Pro	Ser	Ser	Pro
145					150				155					160	
Gln	Arg	Pro	Pro	Arg	Pro	Ser	Leu	Trp	Asp	Leu	Ser	Gly	Trp	Gly	Val
				165					170					175	

Leu Gly

<210> 2837

<211> 1250

<212> DNA

<213> Homo sapiens

<400> 2837

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 120
 tggaaagatc tggcgatgac ctacaaacag agggcagaaa atacgcaaga ggaactccga
 180
 gaattccagg agggaagccg agaatatgaa gctgaattgg agacgcagct gcaacaaatt
 240
 gaaaccagga acagagacct cctgtccgaa aataaccgcc ttcgcatgga gctggaaacc
 300

atcaaggaga agtttgaagt gcagcactct gaagggtacc ggcatatctc agccttggag
 360
 gatgacctcg cgcagaccaa agccattaaa gaccaattgc agaaatacat cagagagctg
 420
 gagcaagcaa atgacgacct ggaaagagcc aagcgcgcca cgatcatgtc tctcgaagac
 480
 tttgagcagc gcttgaatca ggccatcgaa agaaatgcct tcctggaaa tgaaattgat
 540
 gaaaaagaga atctccttga atctgttcag agactgaagg atgaagccag agatttgcgg
 600
 caggaactgg ccgtgcagca gaagcaggag aaaccagga ccccatgcc cagctcagt
 660
 gaagctgaga ggacagacac agctgtgcag gccacgggct ccgtgccgtc cagccccatt
 720
 gctcaccgag gaccagctc aagtttaaac acacctggga gcttcagacg tggcctggac
 780
 gacntccacc gggggacccc cctcacacct cgggcccgga taccagccct caacattgtg
 840
 ggagacctac tgcggaaaagt cggggcactg gactccaaac tcgcttccgt ccggaacctc
 900
 gtgtacgac agtcccaaaa ccgaacaggt ggcccagcct ctgggaggag cagcaagaac
 960
 agagatggcg gggagagacg gccaaagcag accagcgtgc ctttgggtga taaggggtca
 1020
 gtaccttcta ataaacctct cgctggcggg gagaaccgc ctgccccag caagagacac
 1080
 tcacccccag cccacagcca tgtgtctttt taaattatag gattatttca gcaaacctta
 1140
 tcctctctc tgctccctgc aggcagcatt aggtggtgtc ttgtggcttg aacaagggc
 1200
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 1250

<210> 2838

<211> 370

<212> PRT

<213> Homo sapiens

<400> 2838

Xaa	Leu	Pro	Ser	Ser	Pro	Leu	Leu	Glu	His	His	Ala	Thr	Arg	Arg	Val
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Ile	Ser	Ser	Pro	Val	Phe	Thr	Met	Glu	Asp	Ser	Gly	Lys	Thr	Phe	Ser
			20					25					30		
Ser	Glu	Glu	Glu	Glu	Ala	Asn	Tyr	Trp	Lys	Asp	Leu	Ala	Met	Thr	Tyr
			35				40					45			
Lys	Gln	Arg	Ala	Glu	Asn	Thr	Gln	Glu	Glu	Leu	Arg	Glu	Phe	Gln	Glu
			50			55					60				
Gly	Ser	Arg	Glu	Tyr	Glu	Ala	Glu	Leu	Glu	Thr	Gln	Leu	Gln	Gln	Ile
					70				75				80		
Glu	Thr	Arg	Asn	Arg	Asp	Leu	Leu	Ser	Glu	Asn	Asn	Arg	Leu	Arg	Met
			85					90					95		
Glu	Leu	Glu	Thr	Ile	Lys	Glu	Lys	Phe	Glu	Val	Gln	His	Ser	Glu	Gly
			100				105					110			
Tyr	Arg	Gln	Ile	Ser	Ala	Leu	Glu	Asp	Asp	Leu	Ala	Gln	Thr	Lys	Ala


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      115              120              125
Ile Lys Asp Gln Leu Gln Lys Tyr Ile Arg Glu Leu Glu Gln Ala Asn
130              135              140
Asp Ala Leu Glu Arg Ala Lys Arg Ala Thr Ile Met Ser Leu Glu Asp
145              150              155
Phe Glu Gln Arg Leu Asn Gln Ala Ile Glu Arg Asn Ala Phe Leu Glu
165              170              175
Ser Glu Leu Asp Glu Lys Glu Asn Leu Leu Glu Ser Val Gln Arg Leu
180              185              190
Lys Asp Glu Ala Arg Asp Leu Arg Gln Glu Leu Ala Val Gln Gln Lys
195              200              205
Gln Glu Lys Pro Arg Thr Pro Met Pro Ser Ser Val Glu Ala Glu Arg
210              215              220
Thr Asp Thr Ala Val Gln Ala Thr Gly Ser Val Pro Ser Thr Pro Ile
225              230              235
Ala His Arg Gly Pro Ser Ser Ser Leu Asn Thr Pro Gly Ser Phe Arg
245              250              255
Arg Gly Leu Asp Asp Xaa His Arg Gly Thr Pro Leu Thr Pro Ala Ala
260              265              270
Arg Ile Ser Ala Leu Asn Ile Val Gly Asp Leu Leu Arg Lys Val Gly
275              280              285
Ala Leu Glu Ser Lys Leu Ala Ser Cys Arg Asn Leu Val Tyr Asp Gln
290              295              300
Ser Pro Asn Arg Thr Gly Gly Pro Ala Ser Gly Arg Ser Ser Lys Asn
305              310              315
Arg Asp Gly Gly Glu Arg Arg Pro Ser Ser Thr Ser Val Pro Leu Gly
325              330              335
Asp Lys Gly Ser Val Pro Ser Asn Lys Pro Leu Ala Gly Gly Glu Asn
340              345              350
Pro Pro Ala Pro Gly Lys Arg His Ser Pro Pro Ala His Ser His Val
355              360              365
Ser Phe
370

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<210> 2839

<211> 606

<212> DNA

<213> Homo sapiens

<400> 2839

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120
agctgttctt tgcactacat ccacccttac caaccctaat agtatctgaa agctttggta
180
gctgtggggg agatttgcca agactatgac agtgacaaaa tgttccttgc ctttgggttt
240
ggcgccagga tacctccaga gtacacggtc tctcatgact ttgcaatcaa ctttaagtga
300
gacaaccagg aatgtgcagg aattcaagga gttgtggaag cctatcagag ctgtcttctt
360
aagctccaac tctacggtcc caccaacatt gcccccatca tccagaaggt tgccaagtca
420

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gcgtcagagg aaactaacac caaagaggca tcgcaatact tcatactgct gatcctgaca
 480
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 600
 gacggg
 606

<210> 2840
 <211> 202
 <212> PRT
 <213> Homo sapiens

<400> 2840
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 Ile Met Gly Gly Cys Gln Ile Gln Phe Thr Val Ala Ile Asp Phe Ala
 20 25 30
 Ala Thr Asn Gly Asp Pro Arg Asn Ser Cys Ser Leu His Tyr Ile His
 35 40 45
 Pro Tyr Gln Pro Asn Glu Tyr Leu Lys Ala Leu Val Ala Val Gly Glu
 50 55 60
 Ile Cys Gln Asp Tyr Asp Ser Asp Lys Met Phe Pro Ala Phe Gly Phe
 65 70 75 80
 Gly Ala Arg Ile Pro Pro Glu Tyr Thr Val Ser His Asp Phe Ala Ile
 85 90 95
 Asn Phe Asn Glu Asp Asn Pro Glu Cys Ala Gly Ile Gln Gly Val Val
 100 105 110
 Glu Ala Tyr Gln Ser Cys Leu Pro Lys Leu Gln Leu Tyr Gly Pro Thr
 115 120 125
 Asn Ile Ala Pro Ile Ile Gln Lys Val Ala Lys Ser Ala Ser Glu Glu
 130 135 140
 Thr Asn Thr Lys Glu Ala Ser Gln Tyr Phe Ile Leu Leu Ile Leu Thr
 145 150 155 160
 Asp Gly Val Ile Thr Asp Met Gly Asp Thr Arg Glu Ala Ile Val His
 165 170 175
 Ala Ser His Leu Pro Met Ser Val Ile Ile Val Gly Val Gly Asn Ala
 180 185 190
 Asp Phe Ser Asp Met Gln Met Leu Asp Gly
 195 200

<210> 2841
 <211> 2065
 <212> DNA
 <213> Homo sapiens

<400> 2841
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 120
 gaaggggccag ttcaggtggc cggagctcct gagctgccct aggggactgc tgtgggctctg
 180

aggtagtgat gtccccacg gctgcctgag cctgagcccc cagcatcca cccctggggc
240
cactctgtctg ttcaggagca cccaccctgt tcctcgacca tgagcagccc cccagcttac
300
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360
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420
cagtgcgaagt cagagcctcc cctgctgcgt acaagcaagc gtaccatcta caccgcccgg
480
cggccgccct ggtacaatga acacggcacg caatccaag aggccttcgc catcggcttg
540
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660
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720
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780
aagagtgtca aggtgcccat ttatgacttc accacgcaca gccggaagaa ggactggaaa
840
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1080
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1200
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1320
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1380
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1500
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1560
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1620
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1680
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1740
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1800

ttccgcacatca tcccaggcat tgggaacttt ggcgaccgct actttgggac agacgcggtc
 1860
 cccgatggca gtgacgagga ggaagtggcc tacacggggt agctgccacg tgagccatcc
 1920
 cgtccccacc accctctctc tgccctctga cccaggactg ctgaatacaa agatgttaat
 1980
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 2040
 aaaaatgaaa aaaaaaaaaa aaaaa
 2065

<210> 2842

<211> 540

<212> PRT

<213> Homo sapiens

<400> 2842

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 Pro Pro Val Gly Thr Gly Arg Ser Pro Arg Lys Arg Thr Thr Ser Gln
 35 40 45
 Cys Lys Ser Glu Pro Pro Leu Leu Arg Thr Ser Lys Arg Thr Ile Tyr
 50 55 60
 Thr Ala Gly Arg Pro Pro Trp Tyr Asn Glu His Gly Thr Gln Ser Lys
 65 70 75 80
 Glu Ala Phe Ala Ile Gly Leu Gly Gly Ser Ala Ser Gly Lys Thr
 85 90 95
 Thr Val Ala Arg Met Ile Ile Glu Ala Leu Asp Val Pro Trp Val Val
 100 105 110
 Leu Leu Ser Met Asp Ser Phe Tyr Lys Val Leu His Ser Leu Pro His
 115 120 125
 Gln Val Leu Thr Glu Gln Gln Gln Glu Gln Ala Ala His Asn Asn Phe
 130 135 140
 Asn Phe Asp His Pro Asp Ala Phe Asp Phe Asp Leu Ile Ile Ser Thr
 145 150 155 160
 Leu Lys Lys Leu Lys Gln Gly Lys Ser Val Lys Val Pro Ile Tyr Asp
 165 170 175
 Phe Thr Thr His Ser Arg Lys Lys Asp Trp Lys Thr Leu Tyr Gly Ala
 180 185 190
 Asn Val Ile Phe Glu Gly Ile Met Ala Phe Ala Asp Lys Thr Leu
 195 200 205
 Leu Glu Leu Leu Asp Met Lys Ile Phe Val Asp Thr Asp Ser Asp Ile
 210 215 220
 Arg Leu Val Arg Arg Leu Arg Arg Asp Ile Ser Glu Arg Gly Arg Asp
 225 230 235 240
 Ile Glu Gly Val Ile Lys Gln Tyr Asn Lys Phe Val Lys Pro Ser Phe
 245 250 255
 Asp Gln Tyr Ile Gln Pro Thr Met Arg Leu Ala Asp Ile Val Val Pro
 260 265 270
 Arg Gly Ser Gly Asn Thr Val Ala Ile Asp Leu Ile Val Gln His Val
 275 280 285
 His Ser Gln Leu Glu Glu Arg Glu Leu Ser Val Arg Ala Ala Leu Ala

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290                295                300
Ser Ala His Gln Cys His Pro Leu Pro Arg Thr Leu Ser Val Leu Lys
305                310                315                320
Ser Thr Pro Gln Val Arg Gly Met His Thr Ile Ile Arg Asp Lys Glu
                325                330                335
Thr Ser Arg Asp Glu Phe Ile Phe Tyr Ser Lys Arg Leu Met Arg Leu
                340                345                350
Leu Ile Glu His Ala Leu Ser Phe Leu Pro Phe Gln Asp Cys Val Val
                355                360                365
Gln Thr Pro Gln Gly Gln Asp Tyr Ala Gly Lys Cys Tyr Ala Gly Lys
370                375                380
Gln Ile Thr Gly Val Ser Ile Leu Arg Ala Gly Glu Thr Met Glu Pro
385                390                395                400
Ala Leu Arg Ala Val Cys Lys Asp Val Arg Ile Gly Thr Ile Leu Ile
                405                410                415
Gln Thr Asn Gln Leu Thr Gly Glu Pro Glu Leu His Tyr Leu Arg Leu
                420                425                430
Pro Lys Asp Ile Ser Asp Asp His Val Ile Leu Met Asp Cys Thr Val
435                440                445
Ser Thr Gly Ala Ala Ala Met Met Ala Val Arg Val Leu Leu Asp His
450                455                460
Asp Val Pro Glu Asp Lys Ile Phe Leu Leu Ser Leu Leu Met Ala Glu
465                470                475                480
Met Gly Val His Ser Val Ala Tyr Ala Phe Pro Arg Val Arg Ile Ile
                485                490                495
Thr Thr Ala Val Asp Lys Arg Val Asn Asp Leu Phe Arg Ile Ile Pro
                500                505                510
Gly Ile Gly Asn Phe Gly Asp Arg Tyr Phe Gly Thr Asp Ala Val Pro
515                520                525
Asp Gly Ser Asp Glu Glu Glu Val Ala Tyr Thr Gly
530                535                540

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<210> 2843

<211> 497

<212> DNA

<213> Homo sapiens

<400> 2843

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120
caaagccagg aatttgaagc tcaaagtctc aaattccagg aaggtgcgga gatgcttctg
180
aaccccgagg aaaagagtcc ttgtaatatc tccgtaggag ttcacccccc ggactccttc
240
actcaggggt ttggggagca gccacacagg gacctgccca tagggccacc ttttgagatg
300
ccacacaggg ccttgcctgc tacaccgcag tttagatgc ttcagaatcc cctgggtctc
360
acaggagccc ttcgaggtcc aggtcgccgg ggtggccggg cccgggggtg gcagggccct
420
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480

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caggcatcca caccggt
497

<210> 2844
<211> 165
<212> PRT
<213> Homo sapiens

<400> 2844
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Tyr Glu Pro Arg Ser Pro Gly Tyr Glu Ser Glu Ser Ser Arg Tyr Glu
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Ser Gln Asn Thr Glu Leu Lys Thr Gln Ser Pro Glu Phe Glu Ala Gln
35 40 45
Ser Ser Lys Phe Gln Glu Gly Ala Glu Met Leu Leu Asn Pro Glu Glu
50 55 60
Lys Ser Pro Leu Asn Ile Ser Val Gly Val His Pro Leu Asp Ser Phe
65 70 75 80
Thr Gln Gly Phe Gly Glu Gln Pro Thr Gly Asp Leu Pro Ile Gly Pro
85 90 95
Pro Phe Glu Met Pro Thr Gly Ala Leu Leu Ser Thr Pro Gln Phe Glu
100 105 110
Met Leu Gln Asn Pro Leu Gly Leu Thr Gly Ala Leu Arg Gly Pro Gly
115 120 125
Arg Arg Gly Gly Arg Ala Arg Gly Gly Gln Gly Pro Arg Pro Asn Ile
130 135 140
Cys Gly Ile Trp Gly Lys Ser Phe Gly Arg Asp Tyr Pro Asp Pro Ala
145 150 155 160
Gln Ala Ser Thr Pro
165

<210> 2845
<211> 934
<212> DNA
<213> Homo sapiens

<400> 2845
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accgtgtgcg cacgggctgt gcttctcggc tggacacaga gtttggggag gccacttccc
120
ttcaccaagg ctccggggttc tatagccctt ttctgggaca gctgcatggg atccggcctc
180
tcaggcccga cgggtgggtgc gggggctgtg gaaaggtctc agctgcaggg ggatgaatgt
240
gacctccagt tgcaacgtct ccccccgctg gagggtgggt atcaggccta gctcaccttg
300
tgtgcagtc ggtgcagtg ccacctgcgt actggatgct gctctcagtg ctgcggtgcc
360
acagcacaca aaaatagttc tcacgttgcc gtggagagac aagcagtc aa cgcagatata
420
tcctgtggca agtgatggta aatgctgtgg caagaaagca ggttctggag gtgaaggcgg
480

gtgggggaga cagggcaggg aaggtgagca gcggtctgag agtcccttgt ggcacctcgt
 540
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 600
 cgagagtccc ttgtggcacc tcattgggcat cggtaaaagc cgtcatgacc ccgaggatgt
 660
 gccaggagtc agggcctctc ctccctacgtg ggcctgaagg ggctgctgta attcaggagg
 720
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<210> 2846

<211> 149

<212> PRT

<213> Homo sapiens

<400> 2846

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Pro	His	Arg	Pro	Ser	Pro	Pro	Glu	Pro	Ala	Phe	Leu	Pro	Gln	His	Leu
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Pro	Ser	Leu	Ala	Thr	Gly	Tyr	Ile	Cys	Val	Asp	Cys	Leu	Ser	Leu	His
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			100					105						110	
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<211> 2830

<212> DNA

<213> Homo sapiens

<400> 2847

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<211> 856

<212> PRT

<213> Homo sapiens

<400> 2848

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 Val Gly Pro Pro Ser Leu Asp Ala Gln Pro Asn Ser Lys Thr Glu Arg
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 Ser Lys Ser Tyr Asp Glu Gly Leu Asp Asp Tyr Arg Glu Asp Ala Lys

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Glu	Val	Phe	Ser	Asp	Ala	Ala	Lys	Glu	Gly	Trp	Leu	His	Phe	Arg	Pro
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Leu	Val	Thr	Asp	Lys	Gly	Lys	Arg	Val	Gly	Gly	Ser	Ile	Arg	Pro	Trp
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Lys	Gln	Met	Tyr	Val	Val	Leu	Arg	Gly	His	Ser	Leu	Tyr	Leu	Tyr	Lys
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Ser	Arg	Arg	Ile	Lys	Glu	Tyr	Asn	Asn	Leu	Met	Ser	Lys	Ala	Glu	Gln
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			260				265						270		
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Ile	Cys	Cys	Lys	Leu	Val	Glu	Glu	Arg	Gly	Leu	Glu	Tyr	Thr	Gly	Ile
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Tyr	Arg	Val	Pro	Gly	Asn	Asn	Ala	Ala	Ile	Ser	Ser	Met	Gln	Glu	Glu
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			405					410						415	
Pro	Glu	Pro	Leu	Phe	Thr	Asn	Asp	Lys	Tyr	Ala	Asp	Phe	Ile	Glu	Ala
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Ile	His	Asp	Leu	Pro	Glu	His	His	Tyr	Glu	Thr	Leu	Lys	Phe	Leu	Ser
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Pro	Arg	Asn	Leu	Ala	Ile	Val	Phe	Gly	Pro	Thr	Leu	Val	Arg	Thr	Ser
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Thr Gly Val Ser Pro Gly Asp Val Ser Asp Ser Ala Thr Ser Asp Ser
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Thr Lys Ser Lys Gly Ser Trp Gly Ser Gly Lys Asp Gln Tyr Ser Arg
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Glu Leu Leu Val Ser Ser Ile Phe Ala Ala Ala Ser Arg Lys Arg Lys
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Lys Pro Lys Glu Lys Ala Gln Pro Ser Ser Ser Glu Asp Glu Leu Asp
      605                      610                      615
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Lys Glu Glu Ser Lys Lys Glu Ser Glu Thr Leu Gly Arg Lys Gln Lys
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Lys Asp Glu Lys Ile Ser Leu Gly Lys Glu Ser Thr Pro Ser Glu Glu
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Cys Arg Phe Ala Ile Leu Lys Glu Ser Pro Arg Ser Leu Leu Ala Gln
      695                      700                      705
Lys Ser Ser His Leu Glu Glu Thr Gly Ser Asp Ser Gly Thr Leu Leu
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      725                      730                      735
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      770                      775                      780
Lys Gly Asp Glu Ala Asp Asp Glu Arg Ser Glu Leu Ile Ser Glu Gly
      785                      790                      795
Arg Pro Val Glu Thr Asp Ser Gly Asn Glu Phe Pro Ile Phe Pro Thr
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Ala Leu Thr Ser Glu Arg Leu Phe Arg Gly Glu Leu Gln Lys Val Thr
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<210> 2849

<211> 380

<212> DNA

<213> Homo sapiens

<400> 2849

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<210> 2850

<211> 76

<212> PRT

<213> Homo sapiens

<400> 2850

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		20					25					30			
Glu	Glu	Asp	Lys	Lys	Asp	Gly	Lys	Glu	Pro	Ser	Asp	Lys	Pro	Gln	Lys
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Ala	Val	Gln	Asp	His	Lys	Glu	Pro	Ser	Asp	Lys	Pro	Gln	Lys	Ala	Val
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<212> DNA

<213> Homo sapiens

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<211> 317

<212> PRT

<213> Homo sapiens

<400> 2852

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		20						25					30		
Leu	Tyr	Met	Leu	Val	Lys	Met	Ser	His	His	Val	Trp	Thr	Ala	Gln	Asn
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Val	Asp	Pro	Ala	Ser	Phe	Leu	Ser	Thr	Thr	Leu	Gly	Asn	Val	Leu	Val
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Thr	Val	Lys	Arg	Asn	Phe	Asp	Lys	Cys	Ile	Ser	Asn	Gln	Ile	Arg	Gln
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Phe	Val	Ala	Glu	Phe	Glu	Glu	Phe	Ala	Gly	Leu	Ala	Glu	Ser	Ile	Phe
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Lys	Asn	Ala	Glu	Arg	Arg	Gly	Asp	Leu	Asp	Lys	Ala	Tyr	Thr	Lys	Leu
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Leu	Ala	Phe	Asn	Lys	Gln	Glu	Leu	Arg	Lys	Val	Ile	Lys	Glu	Tyr	Pro
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Gly	Lys	Glu	Val	Lys	Lys	Gly	Leu	Asp	Asn	Leu	Tyr	Lys	Lys	Val	Asp
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Lys	His	Leu	Cys	Glu	Glu	Glu	Asn	Leu	Leu	Gln	Val	Val	Trp	His	Ser
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Met	Gln	Asp	Glu	Phe	Ile	Arg	Gln	Tyr	Lys	His	Phe	Glu	Gly	Leu	Ile
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Ala	Arg	Cys	Tyr	Pro	Gly	Ser	Gly	Val	Thr	Met	Glu	Phe	Thr	Ile	Gln

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<210> 2853

<211> 4993

<212> DNA

<213> Homo sapiens

<400> 2853

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<211> 1235

<212> PRT

<213> Homo sapiens

<400> 2854

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Arg	Asn	Ser	Glu	Val	Val	Ala	Ile	Lys	Lys	Met	Ser	Tyr	Ser	Gly	Lys
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Gln	Ser	Asn	Glu	Lys	Trp	Gln	Asp	Ile	Ile	Lys	Glu	Val	Arg	Phe	Leu
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Gln	Lys	Leu	Arg	His	Pro	Asn	Thr	Ile	Gln	Tyr	Arg	Gly	Cys	Tyr	Leu
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Arg	Glu	His	Thr	Ala	Trp	Leu	Val	Met	Glu	Tyr	Cys	Leu	Gly	Ser	Ala
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Ala Ser His Leu Pro Pro Trp Ala Ile His Thr Leu Ala Ser Trp Gly
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Ser Gln Arg Gln Leu Gly Pro Pro Ala Ser His Gln Pro Leu Pro Gly
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<210> 2855

<211> 1676

<212> DNA

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<400> 2855

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<210> 2856

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<212> PRT

<213> Homo sapiens

<400> 2856

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<213> Homo sapiens

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<211> 220

<212> PRT

<213> Homo sapiens

<400> 2858

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      100              105              110
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      115              120              125
Leu Glu Pro Val Pro Arg Gln Asn Gly Asp Arg Phe Ile Glu Glu Lys
      130              135              140
Thr Leu Leu Leu Ala Val Arg Ser Phe Val Phe Phe Ser Gln Leu Ser
145              150              155              160
Ala Trp Leu Ser Val Ser His Gly Ala Ile Pro Arg Asn Ile Leu Tyr
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Arg Ile Ser Ala Ala Asp Val Asp Leu Gln Trp Asn Phe Ser Gln Thr
      180              185              190
Pro Ile Glu His Val Phe Pro Val Pro Asn Val Ser His Asn Val Ala
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Leu Lys Val Ser Gly Gln Ser Leu Ala Gln Thr Ile
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